WORKES
OF
CHERUBECIE

1586

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CERTAINE VVorkes of Galens,

called METHODVS MEDENDI, with a briefe Declaration of the worthie Art of Medicine, the Office of a Chirurgion, and an Epitome of the third booke of Galen, of Naturall Faculties: all translated into English, by Thomas Gale Maister in Chirurgerie.

AT LONDON
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1586.

TO THE RIGHT Honourable, Sir Henrie Neuell Knight, Lord a Burgauene, and his ſinguler good Lord, &c.

FOraſmuch, my ſinguler good Lord, as I haue perceiued you to be naturallie inclined to the art of Medicine, and chiefelie to haue vnderſtanding in that part, which is commonlie called Chirurgerie, I haue not beene a little carefull ſince my acquaintance with your Lordſhip, to further you in the ſame ſtudie, euen to the vttermoſt of my power, and foraſmuch as you haue ſo profited, not onelie in the Theorike part, but alſo in the practike, I haue thought all my paines & labors well beſtowed. And although I ſhould holde my peace, and ſaie nothing heerein, yet a great number of poore men, and others, which haue bene cured of your Lordſhip, of many ſundrie griefes and diſeaſes, will ſet abroade and bewraie your notorious and charitable deedes. And foraſmuch as your Honour hath better vnderſtanding in this worthie arte, than a greate manie of thoſe which take vpon them the name of Chirurgions, I might verie well ſaie, the moſt parte. And foraſmuch as your Lordſhip beareth ſuch a ſinguler loue vnto the ſame arte, I am therefore moued to dedicate theſe my ſimple trauailes vnto your Honour, to bee the patrone and defender thereof, for I doe perceiue, that now in our time no good enterpriſe can be gone about, but falſe detraction and enuie is like to ouerthrowe the ſame, which hath mooued mee for as

much as you are a noble man, the rather to dedicate my trauailes vnto your Honour, to bee my aide and ſuccour in the defending of this my ſmall trauaile, which I proteſt I haue not taken in hand, neither for vaine glorie, neither yet for anie worldlie profit or gaine, for ſince the firſt time that I beganne to ſette out anie parte of this arte in our Engliſh tongue, I haue both ſuſteined great diſpleaſure, and alſo loſt manie profites, of thoſe which were in times paſt my ſpeciall friendes, and the greateſt matter that they haue to ſaie againſt mee, is onelie that I goe about to make euerie bodie cunning in the arte of medicine, with ſetting foorth of theſe my workes in the Engliſh tongue, but if it ſhall pleaſe your good Lordſhippe to vnderſtand my bounden dutie, firſt to almightie God, of whom I haue receiued the talent, and alſo my dutie to my naturall Countrie, whom I ought to profite with my talent, according to the ſaying of our ſauiour Ieſus Chriſt, which ſaith, He that hideth his talent in the ground, and vſeth it not to the profit of his neighbour, it ſhall be taken from him againe. Wherefore my good Lord, I thinke it my dutie to ſet foorth theſe thinges for the commoditie of the common wealth of my Countrie. What greater profite may come vnto any in the time of neede, than to cure his grieuous woundes, without which hee ſhould preſentlie die: to cure his grieuous ſores, which dooth not onelie eate the fleſh, but fretteth and rotteth in ſunder the great bones, with moſt vehement griefe and paine, and alſo great inflammations, and tumours againſt Nature, which taketh awaie the naturall actions of the bodie, and moleſteth it with moſt vehement and contiunall paine, and alſo curing of broken bones, and bones beeing out of ioynt, to reſtore them into their naturall places againe, with many other griefes appertaining to the ſame arte, which were heere to long to bee recited.

And for as much as manie haue taken vppon them the curation of theſe diſeaſes aboue ſayde, and haue committed many great errors for lacke of knowledge, to no ſmall daunger of Gods people, & no leſſe hurt of the cõmõ wealth, I haue thought it therefore my bounden dutie, to ſet foorth my onelie one talent in furthering of knowledge, euen as the

poore

poore widow did, which had but onelie one farthing, and put the same into the Lords treasure,& like as that same was accepted with almightie God,so I trust he wil accept this my good will,according to the knowledge which he hath giuen me,so that at the last daie, I trust he shall not saie vnto mee, thou hast hidde thy talent in the ground, and not profited therewith as thou shouldest haue done.

And also I trust that good men of my Countrie shal haue no cause to haue an euill opinion in mee, either through negligence or idlenesse,for that they may well perceiue that these trauailes do both require studie and time of setting foorth. Now my singuler good Lord, if they shall saie it is not good because it is in the English tongue, then I must alleadge vnto them the famous men which were the chiefe setters foorth of the same art,as Hippocrates and Galen amongst the Grecians,whatsoeuer they might vnderstand by foreine languages, either else gather by reason,or by experience,or obseruation of time,all these,whatsoeuer they were, they did write them in Greeke,which was their owne language & tongue, to that end,they might the better bee vnderstanded,and sooner bee learned. Also in like manner the worthie Arabians, as that noble king Auicen, Auerois, Albucasis, Mesue,& a great sort more of worthie men,which did collect and translate manie noble workes of Medicine out of the Greeke tongue, the Ebrue tongue,and many other languages,into their owne naturall tongue,which was then the Arabian tongue. In lyke manner the Latinists were no lesse diligent to collect and gather,both out of the Greeke and Arabian tongue,& wrote it in their owne tongue, as you may reade in the workes of those famous men,Plinius and Cornelius Celsus, with manie other more,whose workes are manifest at this present daie: If these worthie men haue beene moued with good conscience for knowledge sake, and for the better maintenance of their common wealth, in setting foorth of this art for the reliefe,comfort,succour,helpe,and health,of those that be sicke and diseased,or other waies wounded or hurt,in warre, or by mischaunce,&c. Why should not I then without blame or reproch,for the furtherance of knowledge and other necessa-

rie things aboue rehearsed, set foorth in our English tongue, some part of this good and necessarie arte, for the instruction and further knowledge of those young students, which are desirous to learne the same, and to vse the same to the profite of the common wealth in the time of necessitie, I doe not meane, that honest Artists, as Tailers, Shoomakers, Weauers, or anie other handie occupations, that they should leaue their artes wherein they are perfect, and fal to this art of Medicine, for I doe wish with all my heart, that politike lawes might be made, to constraine euerie man to follow that art, in which he hath bene well instructed and bronght vp in. But my meaning is, onelie to instruct those that be brought vp in the art of Surgerie, vnder some experimenters, who hath little learning in the tongues, & yet desirous to attaine knowledge, and forasmuch as these experimenters are permitted by lawes to occupie the art of Surgerie, I thought it my bounden dutie, both for the furtheraunce of their knowledge, and also for the reliefe of these that be diseased, to set foorth this in the English tongue which I haue done, I doo not goe about to instruct those which be great learned men, and vnderstandeth the tongues, neither yet doe I goe about to satisfie the minde of those that be contentious and captious, that will rather finde fault with other mens dooings, than to further those that be willing to learne with their good dooings. My intent is onelie to further those that be willing to learne, which with humble and gentle heart doo accept and take in good part other mens great paine and trauailes, and forasmuch as Prentises and young men, which haue not beene trained vp in schooles, neither yet can vnderstand the Greeke or Latine tongue, and yet can vnderstand and reade English verie well, and be of readie wit and good memorie, to carrie awaie that they reade & heare: It hath mooued me therfore the rather to write these bookes in the English tongue, & forasmuch as the foundation of art doth consist onelie in reason & experience, neither can ther be anie third thing added thervnto, as Galē affirmeth in his 3. booke, named Therapeuticon, It seemeth to me therefore, that he which vnderstandeth any tongue, whether it be Greke, Latin, or English, it serueth him

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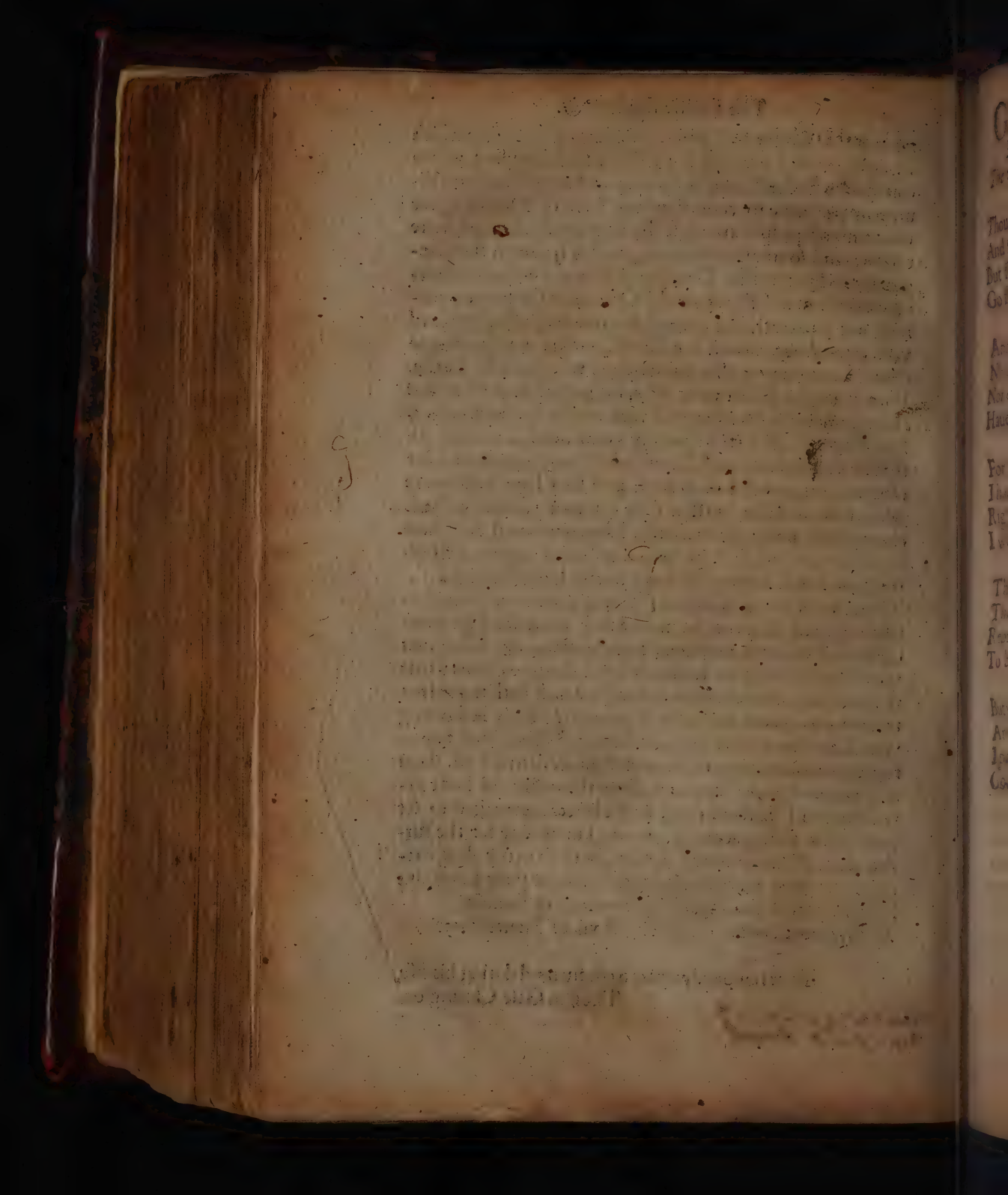
no more but for the further vnderstāding of that thing which he doth reade: for it doth not follow, that euery one which can speake Greke, Latin, or Ebru, by and by to be a good diuine, or perfectlie to vnderstand the Arte of Medicine, for the common people amongst the Gretians, spake the Greke tongue, and so in other countries, which speaketh their language, and yet neither Diuines, neither yet Phisitions, therefore it doth manifestly apeare by Galen, that the tongues maketh not an Artist, but reasonable knowledge being ioyned with experience, maketh the Artist, so that in what tongue soeuer a man may gather knowledge, whether it be Greke, Ebru, Latin, Englisch, or what other language soeuer it be, that same knowledge being ioyned with reason and experience, maketh a perfect Artist: yet my good Lord, I would wish that he that should be a Chirurgion, should vnderstand the tongues, for as much as in times past they haue bene more diligent, & careful to further their common welthes in those countries, then they be in ours, by meanes whereof they haue brought many noble Artes into their owne tongues, which we haue not so largely set forth in our Englisch tongus.

Therefore if the professors of Chirurgerie were learned in these tongues, they might more easely vnderstand the principles of their Arte, with their true diuisions, and definitions which should the more readier instruct them to follow a true methode, and this hath bene one cause which hath moued me to take this matter in hande. Thus most humbly beseeching your Lordship to take these bookes, the fruites of my paine-full trauailes, into your noble protection, & defend both them and me your poore suppliant, from the mallice of busie detracters, and I shall not onely be the better incouraged to set forth other things according to my knowledge for the furtheraunce of the common wealth, but also as my duetie requireth to pray vnto the almightie Lord, for your Lorpships long life, perfect health, and dayly increase of honour.

At my poore house in London, the .vij. of Nouemb. 1566.

Your honors alwayes to commaund during his life,
Thomas Gale Chirurgion.

printed 3 years after his first Book



GO forth my painefull booke,
Thou art no longer mine:
Eache man may on thee looke,
The shame or praise is thine.

Thou mightst with me remaine,
And so eschew all blame,
But since thou wouldst so fayne,
Go foorth in Gods name.

And seeke thou for no praise,
No thanke nor yet reward,
Nor eache man for to please,
Haue thou no great regard.

For as to pleasure many,
I haue bene euer glad,
Right so to displease any,
I would be loth and sad.

The labour hath bene myne,
The trauaile and the paine,
Reproches shall be thine,
To beare we must be faine.

But if thou please the best,
And such as be of skill,
I passe not for the rest,
Good men except good will.

FINIS.

Thomas Gale Maister in

Chirurgerie, vnto those young men which are desirous of knowledge, and are studious in the Art of Chirurgerie.

IN the name of the blessed Trinitie, I for the health of mankinde, haue with great paines and trauaile, collected and gathered together certaine parts of the Arte of Medicine, and haue put the same into sundry bookes, for that ende, they might be the better vnderstanded, and for as much as there be many young men desirous of knowledge in this Arte, and fewe of them learned in the Latine or Græke tongue. Therefore, I with the help of my friends, haue set forth these bookes in English. This part which I haue set forth, is commonly called Chirurgerie, for that it doth cure by the ministring of conuenient medicines with the hand. And for as much as diuers and sundry persons, taketh vpon them to vse the same Arte, hauing little skill in the principles or right vse thereof, and some of the same doe dwell farre from Cities and good Townes, wherefore they cannot haue such counsaile as is nedefull to be had, when great and daungerous cures chaunceth into their hands.

Therefore I haue set forth and published abroade, both for your better vnderstanding, and also safegard of Gods people, these workes, desiring you most hartely to giue God the praise and thanks therefore, and as for my part, I haue done but my dutie, in furthering of the common welth in this my profession and Arte, requiring you in the name of Almightie God, that when great & daungerous cures happeneth into your hands, not onely to be circumspect to trust in your owne doinges, but also to take counsaile of other auncient and graue men that haue had good experience, for in so doing, it shall not be onely a helpe vnto the Patient, but also vnto your owne selues, for in seeing of other cunning

ning mens wo2kes, you shall learne and se those thinges, which you did neuer know no2 se before: & further mo2e, the common people shal haue a good opinion in you, fo2 that you disdaine not to take counsaile of other expert men.

Thus I leaue to trouble you any further, committing this my doing vnto your iudgement, desiring you to take it in as good part as I offer it vnto you, and diligently to reade all these bookes often times ouer, and then I trust you shal finde such commoditie and p2ofit thereby, as shall redound vnto your perpetuall good name and fame, and to the safegard of many people, which other wayes th2ough your ignorance and lacke of knowledge, might vtterly perish.

Thus I beseech the eternall God to bl esse vs all, & to giue vs grace to honour and p2aise his holy name, and to trauaile in this our vocation and Arte, truely, rightly, and without deceit, so that it may be to the glorie of God, to the common welth, and your further knowledge: and finally, to the health and safegard of the people, th2ough Iesus Christ our Lo2d.

FINIS.

A briefe declaration, of the worthy Arte of Medicine, and of the inuenters of the same, and of the parts & names that it is deuided into, and to what ende it serueth.

THE most famous and auncient authors, doth manifestly affirme, that the arte of Medecine, was geuen to mankinde, by the almightie Lord God, that it might helpe our weke and fraile nature, in the time of most greuous sickneſſe, ſet vnto vs for our ſinnes, for if we ſhould alwayes remaine in health, & in good and perfect ſtate, neither ſhould we know our ſelues, neither yet the great might, and power, of the Lord God, which doth both geue health, and ſickneſſe, neither ſhould we ſeke out the vertue of his creatures, as herbes, trees, ſtones, mettals, mineralls, beaſtes, foules, fiſhes, and all other things, that crepeth on the face of the earth, which hath receued of the high and mightie Lorde, both qualities, and properties, to helpe, and cure, moſt greuous diſeaſes, being rightly aplied and vſed, according to reaſon, & experience, and for as much as we doe ſee, that mankinde is altered, ouerthrowen, and corrupted, through ỹ fraylneſſe of nature, by meanes wherof, we cannot alwayes remaine in health, we are therefore driuen by neceſſitie, to ſeke out thoſe thinges, which may reſtore vs againe vnto health. Health is reſtored by ỹ vertue of medecines, and the vertue of medecines, was founde out by long experience: experience, and reaſon, being ioyned together, maketh an arte, and this arte by the common conſent, and teſtimony, of all authors, is the moſt worthy, honorable, and moſt profitable, in all the world: For lyke as man, which is ſubiect to this arte, or the matter, wherupon the artell doth worke, is moſt excellent amongſt all creatures, both in the ſight of God, his creature, and in the ſight of the world, ſo is the artiſt, which worketh vpon his body,

them, and did write, and read their owne language, in such a perfect sort, that in short time, throughout all the coūtrey, they sent letters, one to an other, wherein one vnderstode an others mynde, then Mercurius, for as much as he sawe such vertue, in herbes and other things, as is aforesaid, and how profitable they were, for mankinde, in helping of diseases, woundes, pestilence, and many other things, wherewith, many people in that countrey were afflicted, he having compassion vpon them, and minding, to leaue a perpetuall remembrance in writing, of the natures, and properties of those herbes, and other things aforesaide, and what diseases they serued for. He called vpon the eternall Gods, to strengthen, & assist him in his enterprise, with wisdome, and cunning, & with length of time, that he might set forth these things, to their euerlasting praise, & to the vniuersall profit, and commoditie of mankinde.

And so he began to write, and wrote foure bookes, in tables of wood, as Strabus, doth affirme: and some saith, that those tables indured to the time of Ptolome the great, who did dedicate them vnto the gods, and deliuered them vnto the Priestes of the Temple, where, afterwarde they were destroyed, by the meanes of warre.

Some hold opinion, that Chiron Sentaurus, hearing of this excellent man Mercurie, went forth of Grecia, into Egipt, to learne of him, and became excellent, in diuers artes, and specially, in the arte of medicine, and in knowledge of the simples, and afterwards, he returned againe into Grecia, his owne countrie, and in that time, there reigned in Grecia, a noble Prince named Apollo, who was of excellent wisedome, and diligent in studie, to further the common welth of his countrie, with knowledge, and he hearing of this excellent man Chiron Sentaurus, sent for him, and gaue him great rewards, and so he learned of Chiron Sentaurus, as some writers affirme, to know the natures of herbes, and other thinges, appertaining to the Arte of Medicine, & hauing knowledge of them, and their natures, he put the same in vse, to the great comfort, reliefe and helpe, of the diseased and sicke people, and to his owne immortall fame,

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for that he did help such diseases and sicknesses, which before that time coulde neuer be holpen, wherefore the people did honour him as a God, and supposed that he was a counsaile with the Gods, in that, that he did knowe the nature and propertie of these hearbes, and other thinges, which they did affirme, no man might knowe, except he learned it of the Gods themselues, and after the death of their king Apollo, they lamented and mourned throughout all the Countrie, thinking the art had bene vtterlie lost, but hee beeing carefull for his Countrie, had taught the same vnto Aesculapius his sonne, which when the people vnderstoode, and for the worthinesse of his owne good deedes, they gathered great summes of money throughout all the lande of Grecia, and builded therewithall a rich Temple, and buried his bodie in a meruailous rich Sepulcher within the same, and called it the Temple of Apollo, and dyd honour him as a God, for his most vertuous life, and painfull trauaile, as concerning the common wealth of his Countrie, and speciallie for that hee dyd not disdaine to cure the most miserable diseased people, which before his time perished without remedie.

And now that wee are entered in amongest the Grecians, and for that some affirmeth Apollo to bee the first inuentour of Medicine, wee will proceede forth to the noble men of that Countrie, which had this arte in so great honour and estimation, that they most diligentlie aboue all other artes, studyed it, and in time dyd growe so excellent therein, that they excelled all other Nations in the world, as it doth most manifestlie appeare by their most worthie Bookes, lefte vnto their posteritie, for a perpetuall memorie of their most vertuous and painefull trauaile, which redoundeth vnto our greate commoditie, and to the helpe and succour of those that be diseased.

The most auncient of all the Grecians, I supposed to bee Apollo, who dyd cure many great and wonderfull diseases, by the helpe of the forenamed Chiron Centaurus, and some suppose, for that, that the same Chiron dyd

cure manie grieuous, malignant, and virulent vlcers, amongst other diseases, that the name of the Arte of Chirurgia, was first deriued from Chiron, for that hée dyd minister medicamentes with his hands, and so cured the people, and being the first that practised with medicines by the vse of the hande, it is supposed that hée gaue it that name.

Then after Apollo came Aesculapius his son, who was no lesse diligent and studious in the same arte than his Father, and calling vnto him diuerse Philosophers, and other noble men of his Countrie, and by their aduice and consent, hée dyd constitute it an Arte, and made it lawfull for his subiectes that had studied the same, and béeing brought vp with men of greate experience and practise, to vse the same arte amongest his people, to the restoring of their health, in curing of their diseases and infirmities. By meanes whereof Aesculapius got vnto himselfe immortall fame, and was called the sonne of the Gods, and first constituter and founder of the arte of Medicine, as you maye reade in the Hystorie of Tragus, Homer, and manie more of the Grécke writers, and the same Tragus doeth saie, that those men which vsed the arte of Medicine, were named Iatroes, for that they dyd cure all manner of griefes, woundes, and sores, and in our auncient English tongue they were called Léeches, and in the Latine tongue, Medicus, which names doeth signifie no other thing, but curing and healing of mennes bodies with conuenient medicines.

Then next after were Aesculapius two sonnes, called Machaon and Podalirius, who béeing well instructed in the foresayde arte by their Father Aesculapius, became wonderfull excellent, as it may appeare more at large in the Storie of the Troyan warres, by their cures which they dyd vppon the wounded, sore, and sicke men. These two noble Princes, as Tragus sayth, had manie Disciples, which they taught this arte vnto, and they and their Disples, by continuall practise in prouing experiments, found

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out manie mervailous remedies against poisons of vncleane meates and drinkes, and against the poyson of Hearbes, Serpents, and many other things, and against the poisoning of Swordes, Dartes, Arrowe heades, and Speares, as it is sayd by Demosthenes and other writers.

Then of their Disciples did growe a greate number, which were dispearsed into diuerse partes of the worlde, some were sent for into Aegypt, & some into Persia, some to the Romanes, and some to the Scithians, whereas they were had in great estimation with the Princes and noble men of those Countries, for that they did cure and helpe their wounded and hurt Souldiers, in the time of warres, and also did releeue and cure their people in the time of pestilence and other grieuous infections, to the great safegard, helpe, and comfort of their people, and to the great securitie and staie of the Realme, which if their people had dyed of these contagious infections, that were saued by them, their Country should haue lien open to haue ben taken and possessed of their enimies.

Now of these men, vsing this arte in diuerse Countries, hauing many Disciples, or as wee may tearme them Schollers, and diuerse and sundrie sects and opinions did growe vp amongest them, by meanes whereof there was great controuersie, contention, and disputation of a long time, some suppose it was a leauen hundred yeares, but the matter was not concluded indede, till the time of Hyppocrates, which after long and manie disputations, confuted their fonde and erronious opinions, and brought this most excellent arte, vnto a most perfect waie and methode of curing, which before his time was vnperfect, and vsed onelie by Experience, without anie methode. Some of the same Experimenters affirming, that they coulde cure onelie by dyet all manner of diseases, and other some affirming, that by purging medicines they coulde doe the same, and other some were of that opinion, that with outward medicines onelie, these might bee done,

done, vtterlie condemning the other two. Many other fo-
lish opinions there were, which heere were to long to bee re-
hearsed. Now after all these commeth Hyppocrates, that
most excellent and noble Philosopher, indued by the spi-
rite of God with such excellent wisedome and knowledge
in this most worthie arte, that his lyke was neuer before
or since: hee established this art and made it most perfect,
that before his time was vnperfect. He wrote manie
worthie Bookes of this arte, and speciallie for the cu-
ring of Wounds, Vlcers, Tumours against nature, Frac-
tures, and Dislocations, wherein hee shewed himselfe not
onelie to bee excellent in knowledge, but also in practise,
as it may most manifestlie appeare by the Methode therein
contained, he did diuide the arte of Medicine into diuerse
partes, that it might be the better learned and vnderstan-
ded, declaring which ought first to be learned, which se-
cond, and so to the third and fourth, and so to the fifth, as
it shall hereafter bee set forth more at large. Soranus in
the Preface of his booke, named Isagogus, did saiy that A-
pollo dyd first finde out the arte of Medicine. And Aes-
culapius dyd inlarge it and constitute it an Arte, but that
noble man Hyppocrates dyd finish it, and make it perfect:
He sayth, that by the excellent knowledge of this arte, hee
dyd driue awaie the plague out of all Grecia, and was re-
warded with a crowne of golde of greate value, by a De-
cree made in the Citie of Athens, for his great paines and
good deseruing toward the common wealth. After his
death, the Grecians did make in a perpetuall remem-
brance of his Honourable deedes a most fayre Tombe, at
Delfus, where they did most solempnlie burie his bodie,
and wrote vppon his Tombe this Epitaph which follow-
eth.

Hyppocrates of Thessalia, and by kinde of the Coun-
trie of Coos, doth lie buried in this place, begotten of the
seede of the immortall God Phœbus, & leauing in the world
manie bookes of Medicine to put awaie sickneſſe, and to pre-
serue health, what shall we neede to saie more of this worthie
man,

worthie man, there is no mannes cunning that may giue him his condigne praise.

After his tyme, there was manie in the Countrie of Grecia, which practised the Arte of Medicine, not onelye Kinges, but great learned Philosophers, Princes, Dukes, and Lordes, and by their worthie deedes, in preseruing of mennes liues, and putting away of sickneſſe, they dyd obteine immortall fame, I saye such fame, did indure longer, and was more esteemed, then the fame of theyr Kingedomes: as for their names, I let passe, for that, there be many writers, haue spoken of them at large, there was other diuers professers of Medicine, before the tyme of Galen, that were of worthie fame, as you may reade more at large, in the first booke of Cornelius Celsus, wherefore we lette them passe.

After all these, came that worthie manne, Galen, who was without any comparison, from the beginning of the worlde, vnto this daye, except Hippocrates, not onely for his excellent learning, in so many famous Artes, which he was perfect in, but specially for this Arte of Medicine, which he was most excellently seene in, both in the Theorike, and Practike parte thereof, his worthie Commentaries vppon Hippocrates, doeth well declare his excellent knowledge, wherewith he hath most bountifully garnished the Arte of Medicine, as our latter writers doe saye, more like vnto a God, then a man.

How excellent be these bookes which he hath written of the method of curing, called Methodus Medendi, some part whereof, wee haue with great trauaile, brought into the Englishe tongue, and likewise, other of his bookes also, as hereafter followeth. Well, I will saye no more of him, but what seede so euer were sowen abroad in the vniuersall worlde, be the excellent learned men, in the Arte of Medicine, not onely of Hippocrates, who was the Father and fountaine of all Medicine, as Galen himselfe doeth witnesse, but the seedes of other menne, he hathe gathered together, sowne in one plaine fielde, and watered them with such diligence, that they haue so increased, that

at this daye, the vniuersall earth, hath receiued nourishment by them, perpetuall commoditie and pleasure, and he for his great vertue and painefull trauaile, hath wonne vnto himselfe immortall fame, which shall remaine to the worldes ende. After him came Aesius, who hath written diuers worthie bookes, in the same arte of Medicine.

Also Oribasius, Actuarius, and Paulus Aegeneta, were worthie writers in the same Arte, as you may see by their workes, which they haue written, Dioscorides also, which was before Galens time, I may not forget, for his painefull trauaile, in knowledge of the simples, as it doth apeare by a worthie booke, which he hath made thereof. All these and many more, were worthie men amongst the Grecians, and professers of the arte of Medicine, and dyd alwaies extoll and take Apollo, as the chiefe Captaine, and first beginner of the arte of Medicine: and Aesculapius, his sonne, to be a setter forewarde of the same, and Hippocrates, did make it perfect and finish it.

What shall I saye, for the worthie Arabians, as that noble man of Cartage, named Aunconius, Prince Auisen, Auorois, Auinsor, Rasis, Mesuea, Albucasius, and many other worthie men, that spronge emongest the Arabians, who hath not a little garnished the Arte of Medicine, with a great number of most excellent bookes, which are to be seene at this daye.

All these men, I saye, take their beginning of Galen, and doeth honour him as their principall head, and doeth glory, and exalte them selues, in his name, for that they neuer had perfect method of curing before his time, but cured onely by experience, as they were taught of their maisters. For Hippocrates workes before Galens time, were so short and obscure, that they were vnto most men, not vnderstanded, by meanes whereof many doubtes did grow, but Galen, by most worthie commentaries, made vppon the same bookes, made those doubtes most plaine and euident, vnto all people, by meanes whereof, not onely many worthie Grecians, as I haue sayde before, haue taken a courage to

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wrote, but also many of these moste famous Arabians, haue followed their steppes, and examples, in setting forth many excellent workes, in the same Arte of Medicine, not onely to the sauegarde of their Prince, and people, but also to their immortall fame, and perpetuall and euerlasting honour.

The noble Latinistes, haue also deserued no lesse fame, both in seeking out the knowledge of simples, and also in setting forth of most worthie workes, in the Arte of Medicine, as these worthie men, Cornelius Celsus, Plinius, and before them Cato, Verro, Alexander, and many more, which were men of worthie fame, all these, as I haue saide before, haue taken their originall and beginning, from Hippocrates, and Galen.

It is also most apparant, that there are manie worthy men ỹ haue written in these latter dayes & no small number in our time, and of manie Countries, some dyd wryte in Fraunce, some in Spaine, some in Germanie, and some in our owne Countrie, and many of them were famous men, and menne of great and excellent knowledge, and practise.

As Lamfranke, Archbishoppe of Millon, Guido, of the schole of Mompillor, and Commissarie to the Pope, Rogerus, and Roulandus, of the schole of Mompilor, and Chirurgians vnto the King of Fraunce, Rose Anglus, Gilbertus Anglus, Hugo Wiklefe, Anglus, of the schole of Cambridge, and John of Newmark Theodoricus, and Brunus, of the schole of Bonane, Arnoldus de villa noua, and Plasentinus, of the schole of Mompilior, Petrus de Argilat, and Gordonus: all these dyd write of the Arte of Medicine, about two or three hundred yeres since, and all these builded their foundation, and toke their originall, of Hippocrates and Galen, and nowe in our tyme, there hath bene famous writers, as Iohannes Virgo, Antonius Muse, Antonious Gallus, Nicolaus Masse, Iohannes Baptista Montanus, Iacobus Siluius, Alfonsius Ferrey, Hollerius, Leonardus Fuchius, Iohannes Tagaltius, Gabrielus Falopius, Rioldus Columnus, Antonius Calmisius Vassalius, Ioh. Fernelius, Amatus Lucitanus, Fraciscus Valleri olus,

olus, Ieronimus Cardanus, Matthiolus, and a great many moze, of learned men, who we will passe ouer, foz troubling of tyme.

All these which I haue spoken of, of what Countrie so euer they were, they toke their oziginall and foundacion, of our Father Hippocrates, and Galen, although they haue founde out many thinges, appertaining to the Arte of Medicine, which we finde no mention made of, neither in Hippocrates, noz in Galen, yet they had their foundation from them, and all these men, of what countrie so euer they were, they haue dzonke of the water, that flowed out of their two welles, and doe greatly reioyce therein, and who that lisk to reade their wozkes, may perceiue the truth thereof.

Now my friendes, to tell you the truth, in my iudgement, what was the cause of these mennes wzitinges, I take it to be chiefely, to sette fozth the glozy of God, in his wonderfull creatures and wozkes, as touching their natures, qualities, and pzoperties, which doth appertaine vnto this artist, which doth vse the Arte of Medicine, to consider vppon, foz all maner of thinges, vnder Heauen, doe serue either foz mannes nourishment, oz else foz the making of his bodie, oz else foz necessarie remedies in the time of sickneste, oz else foz pzeseruatiues, to kepe him from sickneste, and to pzeserue health. So carefull was the highe and mightie Lozde God, foz his creature, man, that he made all these thinges, to serue his vse, as necessarie helpes, in the time of his necessitie, and placed him in the place of ioye, with great solemnitie. But alas, his frayle nature, was the cause of his sodaine ouerthzowe, from ioye to sorow, from pleasure, to paine, from rest and quietneste, to perpetuall labour and vnquietneste, from a most temperate Ayze, and pleasant place, into a miserable wozlde, tozmented with innumerable contrarie ayzes, and chaunge of windes.

Yea, I saye, euen from the place of health, into the wozlde of sickneste and miserie: where our bodies be altered, and weakened, euerie daye, by mixing together,

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of contrary Elements, and we being subiect to the same, are dayly tormented, with innumerable diseases. And although Adam, at the first creation, was indued with most excellent wisedome, and knowledge, by the power & might, of the Lorde God, so that he dyd know all things, that were vpon the face of the earth, in the waters, and deepe partes thereof, not onely their qualities, and properties, but their substanciall formes, and figures, and gaue them names, as he himselfe thought good, for he had perfect knowledge of all thinges, by the deuine spirit of God, which dyd worke in him, according to his first creation: but when he had sinned against the Lord God, then was taken from him his diuine knowledge, and lefte here in this world, bare and naked, to take paines, and studie for all those things, that he would receiue commoditie of.

Now man, as I sayde before, being wrapped about with innumerable sicknesses, diseases, and sodaine chaunces, which bee subiect to the arte of Medicine, which Arte, I call the arte of curing and healing, was constrained to seeke for remedies, in the tyme of his necessitie. And sought out Herbes, Rootes, and manye other thinges, to helpe his diseases, and griefe withall, and by vse and longe time of practising, they dyd finde out the natures, and properties of many thinges, wherewithall, some tymes they dyd good, but by chaunce, for they obserued, neither the natures of bodyes, nor their temperatures, nor the disease, neither yet the causes thereof, but onely regarded those thinges which they dyd see and feele.

Thus farre wyde was man, from that excellent knowledge, which was geuen him in the beeginning, for in the beginning, he was not onely indued with most beautie, but also with most excellent giftes of knowledge and wisedome.

All other creatures, besides man, which hath not sinned against the LORD GOD, but followed the nature of their first creation, all these wee see by experience, haue a certaine diuine nature in them, which man lacketh, for man dyd lose it through sinne, which these creatures haue not

not done, and for the proofe hereof, we will begin with the dog, which being sicke, seeketh for a certaine grasse, & eateth thereof, and with the same cureth his griefe and disease: Onelie a diuine nature teacheth him this, without anie studie. The Squirrell also prouideth her selfe nuts against Winter. The little Ant or Pismere doth gather seeds into the ground, and biteth them in the end after such a cunning sort, that they may not grow. The Storke also being grieued or anoyed with anie vncleane thing that she hath eaten, flyeth to the sea, and giueth her selfe a clister with salt water, ministring it with her bill at her wather end, by meanes whereof she purgeth and cleanseth her selfe of her griefe and sickneese. Thus may you perceiue the diuine and wonderfull woorkes of almightie God, woorking in his creatures by a diuine nature, but man lacking this diuine knowledge, and lefte duelie to reason and Experience, is constrained by greate studie to bring to passe those thinges which by imperfection of Nature doth lacke in him: By meanes whereof, all these most worthie men afore said haue put in writing manie worthie Bookes of this arte, which arte they haue obtained by greate studie and experience, and by a reasonable method or waie, haue taught the same vnto others, not onelie to that end, that the glorie of God in his great and wonderfull woorkes, maye be the better knowen, as I haue sayde before, but also for the common wealth of their owne Countries wherein they did dwell. The Princes and subiects being wounded, hurt, or diseased, by their greate and paynefull trauaile, and by theyr greate studie and most approued experiments might be restored againe vnto their health, and the rest which be in good health, might be defended from most cruell plagues and sicknesses, by the helpe of this most worthie and excellent arte. This art (I saie) is most worthie, for that it worketh vppon the bodie of man, which is the most excellentest creature of all the world: and as the subiect is excellent, which the artist doth woorke vpon, it must needs followe, that the artist must be most worthie which woorketh vppon so excellent a subiect.

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And furthermore, to proue this art to bee most excellent, and most of all other to be had in honour and reuerence, I proue it by the saying of Saint Paule, That some men had the gift of wisedome, some of prophesying, and some of healing: and Saint Paule saith, That these were done by the spirit of God, that is to saie, by the holie Ghost. Therefore Hyppocrates and Galen, hauing the spirit of wisedome and of the art of Medicine, most abundantlie poured into them, dyd excell all men before their times, and set forth this art so perfectlie and exactlie by the power and vertue of the same spirite, that all the vniuersall worlde hath receiued such commoditie by them, that their most excellent fame shall indure to the worlds end. All other men being endued with the same spirit, and with the examples of them, to set forth such knowledge as they are endued withall, for the helpe and maintenaunce of their common wealth, and for the relefe and comfort of the diseased subiectes, haue bene from time to time moued with the spirite of God, to write manie volumes of bokes to their posteritie, wherein they haue taught them the methodes of waies of curing, not onelie of grieuous wounds, great Apostumes, vlcers, fractured bones, and dislocations, but of all other infirmities and diseases, that chaunceth vnto the bodie of man, with their proper signes and tokens, to iudge them by their natures & properties, their distemperatures, with their names and most exact diuisions, to that end that they maye bee more rightlie vnderstanded, iudged, and aptlie cured.

Here may a question arise, what this arte of medicine is, and what you call him that vseth the same, for manie men suppose that he is properlie named a Physition, and other some supposeth that hee shoulde bee called a Chirurgion, by meanes wherof in times past ther hath growen some contention as perteining to the Instrumentes proper vnto the said arte of curing, y is to saie, the vse of the hand, called Chirurgia, conuenient diet, named Dieta, and ministring of conuenient medicaments, named Phermacon.

For anie were therof I haue told you my opinion before, y

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in the beginning the Artist was called Iatros, amongst the Grecians, and amongst the Latinists, Medicus, and in our Countrie, in our auncient tongue, he was called a Læch: which three wordes, that is to saie, Iatros, Medicus, & Læch, signified no other thing but to cure, that is, a curer of diseases, sicknesse, and sores, wherewith mans bodie is grieued. Now, these diseases cannot be cured without cõuenient instruments, which instruments are first & chieflie the hands of man, that doth make readie conuenient nourishment or medicines, and ministreth the same vnto the sicke man, or else commaundeth the same to be ministred in conuenient order. The second is diet, which is a speciall instrument, as well for the curation of Wounds, Apostumes, Ulcerations and tumours against nature, as for all other diseases which chaunceth vnto mans bodie: Both Hyppocrates and Galen doth prescribe proper diet for wounds, according to the temperature of the bodie, according to the nature of the wounded part, and according to the nature of the accidents that may be ioyned with the same wound.

In like manner Galen prescribeth a diet for those that hath vlcerations, not onelie in Cancers, but also in many other kinde of vlcers, which may neither be conuenientlie cured, neither yet preserued in good state, without conuenient diet, and as for tumors against nature, they require no lesse helpe of diet than the residue: for it is a generall rule that we first take indication of the nature of the disease which we entend to cure, and of the effects of the same. As for example, in Phlegmon, which is an inflammation ingendered of bloud, for of nature Phlegmon is hot and moist, but his affect is to make inflammation, not onelie in ỹ part where it is aggregated, but by consent and affinitie, which the grieued member hath with the rest of the bodie, it doth often times moue a Feauer, which might grieue and trouble all the bodie, and cause the inflammation to be more vehement in the grieued part. Therefore the Artist ought chieflie to prouide for this mischiefe, and there is no better waie to resist the same, than by giuing of conuenient diet, which must be colde and drie, contrarie to the nature

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of the disease which commeth of bloud, being hot and moist, for these be generall rules, taught both of Hyppocrates and Galen, that euerie disease with his affects, bee cured with his contrarie.

Thus I thinke, there is no reasonable man that will denie this instrument to appertaine chiefelie to the arte of Chirurgia, for reason doth approue and allowe it, and experience doeth finde it most necessarie and true: Therfore I must saie, as Galen saith in his third booke Methodo Medendi, All artes are grounded vpon reason and experience, neither is there anie third thing to be added therevnto: If anie man can shew me how we may cure vleers, tumors, and other things appertaining to the art of Surgerie, by a third waie, and with other instruments than these worthie men haue found out by reason and experience, then I will giue place, and be glad to learne it, and if I finde the same to be more profitable & commodious for the common wealth and for the grieued persons, I wil not onelie endeuour my selfe to learne it, but also to followe it, extoll it, and teach it vnto other, but if no man can shew me anie other waie than reason ought to teach him, to suffer me to restore my sicke Patient to health, by the permission of God, with those instrumentes that bee most necessarie and proper for mine Arte.

Furthermore, as concerning Pharmacon, which is called Medicamentum or Medicine, I thinke there be no men ignorant, no not so much as those that be vtterlie vnlearned, but that they knowe that medicine is an instrument to helpe to cure diseases and sicknesses withall, for who can cure a wound, a tumour against nature, or an vleer, onelie with his handes without medicine, I thinke there is no man that is so ignorant or stupidious, that thinketh that to be true, then of necessitie it must followe, that these bee three instrumentes, and not three partes of medicine, as manie men haue misconstrued both Hyppocrates and Galen, both contrarie to reason and true experience, for the hands alone cannot cure without Medicine, neither can the medicines bee ministred without handes, neither yet can

anie man take meat or drinke, except it be ministred with the hand, then of necessitie it must followe, that these three cannot bee diuided, forasmuch as one is holpen by another, and the desired health brought to an end by all these three, and not by anie one of these alone, as Hyppocrates dyd right well proue, in confuting of certaine sectes that were in his time, as Tragus doth make mention by the authoritie of that noble King Democrates, affirming that there were certaine sectes, which then dyd vse the arte of curing, some by inward medicine onelie, which they did purge the bodie withall, and some by dyet onelie, which they did vse, as it seemed vnto them good, and some by ministring of outward medicines, to such partes of the bodie as they thought good. And euerie one of these did affirme that they would restore mannes bodie to health, what disease so euer it were affected withall, if that the saide disease were curable, onelie with one of these three wayes, and that the other two were superfluous, and needs not to bee vsed. By meanes whereof there did growe greate contention, and great disputation was had therein, and in conclusion they did seeme to confound all three partes, each of them thus confuting other.

When Hyppocrates hearing of this great contention amongest them, they all three professing the curatiue parte of the Arte of Medicine, sent for them, and appointed vnto them certaine men to cure, and asked them in what space they would cure the same persons, and they appointed a certaine time, and Hyppocrates gaue them foure times so long space: Then euerie one of them with great diligence according to his owne sect and waie dyd minister. Notwithstanding the Patients were not made whole, so that they were constrained to leaue them vncured, when they coulde doe no more. When Hyppocrates sawe their doinges, howe farre wide it was from a reasonable methode, yet how ingenious and wittie they were in deuising and inuenting of medicines to bring their purpose to passe, hee did not a little meruaile.

Then with curteous wordes he perswaded them to

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leaue off their preciſenesse and seuere sectes, and to vse a generall methode, wherein all those three were ioyned together, and to vse euerie one of these in his conuenient time and place, each one of them to helpe other, and then ther was no doubt but with their excellent inuentions, they would cure wonderfull griefes and diseases, which otherwise could not bee brought to passe.

Nowe when Hyppocrates had made these three men friendes, hee required them to goe with him to their sicke and grieued Patients, and sayde vnto them: That with the same medicines which they had ministred before, by the permission of the immortall Gods hee would make all their three Patients whole. So Hyppocrates ministring no other dyet, but such a diet, as hee that ministred the dyet had vsed before, neither yet anie other purging medicamentes, than he that vsed to cure with purging medicaments had vsed before, nor yet anie other plaisters or ointmentes, than hee that vsed to cure with plaisters and ointmentes had vsed before, euen with the same medicines that they did vse, by vsing of them in conuenient time and place methodicallie, did cure all their sicke Patients: By meanes whereof they were perswaded to followe his doctrine, and to vse these as common and generall instruments for the arte of curing, and all they to be exhibited and vsed with the hand.

Thus it doeth appeare by Hyppocrates, that none of these may be absent from him that vseth the arte of curing.

Galen also as concerning purging medicaments, where hee intreateth of the same, sayth, they bee verie profitable, yea, and also most necessarie in the curing of Cancers, olde, stubborne, and rebellious vlcers, and also in Herpis, Herisipelas, &c.

And these purging medicines were chiefelie inuented and found out by experimentes, wherewithall they did purge and drawe awaye these vicious and euill humours, which was the maintaining cause of all those Vlcers and grieued partes, as it is afore sayde,

which other wayes could not haue bene cured: Galen also in his fourth booke De Methodo Medendi, by the authoritie of Hyppocrates, doeth saie thus, That Purgations of the bellie is profitable to manie vlcers, and also to woundes of the head, of the bellie, and of the ioyntes, and where there is daunger of corruption of the bones, or where stitching behoueth in woundes or where Erosians be, or where Herpis, and other affectes be, which hindereth the curation of Vlcers, and also where rollinges must be vsed.

By these wordes it is apparant truelie, that Purgations are profitable both to woundes and vlcers, at all times, when they be greate and grieuous, I meane not onelie Purgations ministred by the vpper partes, but also Purgations ministred by the neather parts, as Clisters, and such like.

Thus I doe conclude, that these three Instruments are most necessarie for those men that shall cure hurts, griefes, and diseases, and in no case maye be separated or taken from them: For lyke as the Carpenter & shipwright must of necessitie vse lyke instrumentes to finish and bring to passe their worke withall: euen so must the Artists in this arte, by what name so euer you will call them, haue and vse conuenient Instrumentes to bring to passe the desired health, which is the end of this art. If the Carpenter should saie vnto the Shipwright, thou maist not vse the Axe, the Saw, the pearcer, nor yet the hammer, for that they be proper instruments for my arte, then the shipwright might aunswere him and saie, they be proper for my Arte also, and without those instruments I cannot build my shippe, nor bring to passe the desired end of my Arte. Euen in lyke manner it may be sayde in the Arte of medicine, for whether he be called by the name of a Phisition, or by the name of a Chirurgion, of by the name or a Lœch, or by what other name you wil cal him, if ye wil admit him to cure woundes, Tumours against Nature, vlcers, or what diseases so euer they be, it is necessarie that hee haue his proper Instrumentes apt and meete, to bring the same to passe withall. But if wee shall stand vppon the names of the Arte,

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and confound the instruments, then shal we seeme to maintaine a vaine disputation, and spend time about those names, which are to small purpose, for the name is not the thing that doth cure, but the arte, beeing methodicallie and rightlie ministred. For Galen in his third and fourth booke, De Methodo Medendi, doth name him Medicus, that doth cure vlcers and woundes, therefore it seemeth to mée that Medicus and Chyrurgus bée indifferent names for those that professeth the arte of curing, and for anie thing that I can perceiue, either by the wordes of Hyppocrates or Galen, or by anie other notorious and famous writers that haue written in this arte: The Chirurgions ought not to bée forbidden neither the ministring of purgations, nor yet of dyet, for as much as they be their chiefe and principall instruments, without which they cannot bring to passe their desired scope of health: And if we shall speake of the antiquitie of names, I suppose the name of Chirurgia to be much more auncient than the name of Phisicke, for I suppose Phisicke to be deriued of Phisilogia, which worde doth signifie, naturall knowledge of mannes bodie, and of all the partes and members of the same, &c. And Chirurgia is deriued of Chiro, which is a hand, or as we might saie, a ministration of Medicamentes, done with the hand, vnto mannes bodie, onelie by experience. So that all those that were before the time of Hyppocrates, were accounted but as experimenters, and to followe an arte without a right methode, which that noble man Hyppocrates perceiuing, dyd lyke a most famous Philosopher, according to reason, ioyne together all these vnperfect sects, which were in his dayes verie manie, and taught them one perfect and true waie, methodicallie to worke, and also certaine rules howe they shoulde learne the same arte, and diuided it into fiue speciall partes, as we shall declare hereafter, which partes beeing perfectlie vnderstanded, is the right waie to procéde to the curation of mannes bodie, and without knowledge of these fiue partes, no man can methodicallie and rightlie cure anie Vlcers, Woundes, Apostumes, or anie other diseases, as wée haue sayde before, for whosoeuer

taketh vpon them, hauing not knowledge of these, he may be called a practiser, and experimenter, or an emperike, as the most parte of our Chirurgions may be called, that bee not learned in these partes, and doth worke onelie by experience without reason, but those y vnderstand these partes, and followeth a methode in their curing, whether they doe cure Wounds, Tumours against nature, Apostumes, Vlcers, or what other thinges so euer it bee, that doeth appertaine to the arte of curing, that same Artist may be called Medicus, a Medendo, that is to saie, of curing, for so doeth Galen name him in his third and fourth booke De Methodo Medendi, according to the translation of that learned man Linaker.

And forasmuch as ye shall the better credit the worthinesse of this arte of Chirurgerie, as well for the antiquitie thereof, as for the Instruments appertaining to the Artist, I haue heere set forth before your eies an Epistle made by Franciscus Valleriolus, in the commendations of the arte of Chirurgerie, which Valleriolus is one of the most notable learned men in the arte of medicine that is nowe liuing, whose wordes hereafter followeth.

The office of a Chirurgion,

and the Instruments appertaining vnto the same Art, set forth by Franciscus Valleriolus, Medicus, Anno Domini. 1562.

IT is commonlie knowen, & I haue shewed it before, that the other part of the Arte of Medicine, is that which cureth with the hand, which also the Grekes doe call Kyrurgicon, for the manner of working, & we keeping that name doe call it Chirurgia. This part as it is counted among the olde writers the ancientest, so truelie both for the magnitude and for the profite

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of the effects, it is counted the chiefest. Moreouer, Podalirius and Machaon, being the first authors of that art, as it is supposed, and the lawfull issue of Aesculapius, the father of the art of Medicine, doe declare the ancientnesse thereof, whom as Homer writeth, followed Agamemnon their Captaine in the Troyan warres, and to haue bene no small helpe to his souldiers in curing of them, not by the helpe of inward medicines onlie, but in curing diligentlie of their wounds, with yron instruments, and with other fit medicines thereunto appertaining, whereby it doeth appeare, this parte of Medicine to be onelie proued of them, and the same to bee auncientest.

Furthermore, the profit and vtilitie thereof, doeth of it selfe manifestlie appeare, by the curations of greate Apostumes, of wounds, of vlcers, of luxations, and of Fractures, all the which this part of Medicine doeth intreate of exactlie. And of this part we will intreate in this Chapter, and of the same we will shew forth these things what that art is, and what be the parts of it, what is the end thereof, who be the authors, what the office and dutie of a Chirurgion is, what be his instruments which he hath accustomed to vse in healing, what a one he ought for to be, and to conclude, who ought to be accounted the best Chirurgion, and thus we will finish our Chapter.

Chirurgerie is defined of Galen to be a certaine order of curing, which is accomplished by accustomed incisions and adustions, and other thinges which are done by the hande. Moreouer, the author of the Introductorie, whosoeuer hee hath bene, hath defined the same after this manner (as they doe properlie call it) a taking awaie of things hurtfull, by incisions and concinations, by a certaine methode & reason. In like manner it is the curation of wounds and vlcers, which is administred to mans bodie. But if anie man will set forth the order of it more curiouslie and expreslie, he will call it the third part of the methode Therapeutichon, which doth cure diseases, by the artificialnesse of the hand, by adustions and incisions, and by curing luxations, and by putting broken bones into their places, and such like. Guido of

Caliacensia hath so defined, that it maye be a science, which may both teach the order and qualitie of operation, chiefelie by agglutination and incisions, and other operations of that kinde, which bee done by the vse of the hand, restoring men to their health as much as is possible.

Also, it behoueth vs to vse this name of Science more largelie in this place, and applie it vnto that parte of Chirurgerie which doth profit by meditation of preceptes and giuing of Methode, and not by curing with the hand. For it is manifest that Chirurgerie is an Arte, and not a Science properlie, whose end is the bringing to effect, and not the contemplation of the veritie onelie, and for that cause Aristotle would haue the same worthelie to be an arte, and also hath thought it good to place it amongest those artes which do pertaine to the vse of the hand: But other things being put in the definition, doe kéepe their place of difference in like manner, this parte is not put vnaduisedlie to the definition (that men be restored to their health) as much as is possible, for although that health is counted to a Chirurgion, for a perpetual scope, yet that same cannot alwaies be obteined by arte, because there be many diseases vncurable, which doe chaunce, eyther because they are such by their owne nature, as Elephantiasis, or else, that as the curation is taken in hand, doeth bring more discommoditie, and also a more grieuous sickneſse than that which is taken in hand to be cured. As when we goe about to cure Vitiliginem, Antiquam, Lichenas, Hemorroidas, Sinuosa vlcera, and the old Fistulas, Cancers, and to conclude, when as we haue a stubburne patient which doth giue no regard to the Surgions that gouerneth him: these are the causes why that all cannot be brought to their health by arte: In like manner Chirurgerie is diuided into two partes generallie, the one is, which doth declare what things belong to the art, & doth set forth the precepts, wherwith the workman being furnished, may worke rightly: This part the Grécks do call Theoreticon, & we do cal it Theorica, ỳ is to saie, ỳ learned or speculatiue part, ỳ other doth folow ỳ, & doth perform in effect ỳ precepts of ỳ former, & it is called in Gréek Practi-

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ca, or rather Poetica, ỳ is to say, a bringer of things to passe, for it wholy doth consist in doing and bringing to effect, and seeing that the whole Arte, doth depend of these, we maye with good cause, thinke Chirurgerie worthie to be called an arte, as whose ende, is affection and worke. For the doth exercise all her properties, either in soft mẽbers, or in harde parts. The soft parts are those, which haue their beginning of bloud, and are called fleshie, and the hard parts do spring of séede. And chirurgerie doth exercise her facultie in those partes by incision, by cutting, or by taking away, by reposition, and adustion. And truely of this arte, there are certaine other more speciall partes, as those about the which the arte it selfe is speciallye occupied, that is to saye, Tumors against nature, wounds, vlcers, fractures, and Luxacions. Therefore as there be fiue parts which the art doth intreate of, so there be fiue partes of Chirurgerie, in the whole, as which doe teache vs to cure tumours, which woundes, and which vlcers, and which can put fractures and luxacions, in their proper place. But the ende whereunto Chirurgerie directed all his actions, and prouisions, is the ablation, and taking away of those sicknesses, which maye be cured by ministration of conuenient medicines with the hande, & to restore the sicke, vnto his health, which ende truely the workeman cannot alwayes obtaine vnto. For those causes which we declared before, séeing that it is not in his power, to cure euery sicknesse.

And this long arte, vaunteth hir selfe, vnto the famous companie of excellent and noble authors, worthie of great renowne. In whose register, that diuine man Hippocrates, the patron and defender of the noble arte of Medicine, doth of very right, challenge to him selfe, the chiefest place, by whose meane this parte of medicine, is better declared, then it was before his time, the which thing, the deuine monuments which he left to his posteritie, doe witnesse, I doe meane his bookes, wherein he doth speake, of the woundes of the head, of fractures of the lyms, of vlcers, of fistules, of the emorodes, and of the furniture of Chirurgerie, and of cutting out of the Anathomies.

Furthermore, Chirurgerie beinge as it were deuided at length from the other, hath chosen vnto hir selfe a proper place, and begonne to haue hir proper professors, for in the time of olde writers, & in the florishing age of Hippocrates, Chirurgia was not deuided from the other parts of medicine, for they were then both Phisitions and Chirurgions. And Philoxenus declareth it to haue florished in Egipt, which hath set forth and garnished this Arte in many volumes. And after him Gorgias Sostratus, Hieron, and the two Apollonij, Amomus, Alexandrinus, and many other excellent men, and it is certaine, that there was no meane professors of the same arte, at Rome, as the auncient Fathers, Tryphon, Euelpistus, and Meges, the most excellent of all, as Celsus writeth. But how much Galen excelled, in restoring, and enriching this parte of medicine, his learned Commentaries, vpon the bookes of Hippocrates, wherein he doth declare of the Arte of Medicine, and vpon his booke De articulis & de fracturis. And moreouer, his fiue bookes, of the first methode of curing, called Therapeuticon, and the last two of the same, ỳ two also, De arte curatiua ad Glauconem, his booke, De tumoribus preter naturam, & his booke De compositione medicamentorum, secundum genera, doe testifie abũdantly. Moreouer, Paulus ægeneta, ought greatly to be commended, who in a method compendious, but yet most exact, hath comprehended all Chirurgerie, both in his fourth booke, and also in his first.

Furthermore, Auicenna, Rasius, Albucasis, and Haliabbas, being of the schole of the Arabians, haue intreated most diligently, of the Arte of Chirurgerie, as Auicenna, in his fourth Canon, and the third, fourth, and fifte fen.

Also Rasus, in his seuenth booke, to Almansor, the King, Albucasis, in a whole volume, Haliabbas, in his ninth booke, of practise of the regall disposition, neither hath she lacked hir honour, of Latines, Celsus, and Plinius, Captaines, who with great beautie, and like dignitie, haue intreated briefly of this parte. Why should I passe ouer Guydo de Gauliaco, who onely among the French, we haue knowne to haue intreated very well of Chirurgerie, if ye regard the

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reason of the arte? We may truelie gather by his rude speech that he wanted onelie such happie time wherein he could not come to the knowledge of the Greeke tongue, nor to the pure eloquence of the Latine tongue, whilest at that time ignorance and barbarousnesse exercised tyrannie ouer good learning, which was the cause that in rehearsing the place of Galen, the truth of the author was much defaced: But if God graunt me life, I will diuide those places of the Arte of Medicine, from the common place, I trust that I shall helpe Guido, and I will of a barbarous and impure writter, make him a fine and eloquent Latinist, & restore him to his beutie, & which our frieñ Siluius hath performed in correcting Mesueus, the same doe I faithfullie promise to the studious, to multiplie in repairing of Guido, if God prosper our indeuours, although perhaps without meete or equal thanks, yet shall I doe it with due labour and good will. But now I will returne to my purpose, for manie famous men, and authors most worthie of fauourable commendations, haue set forth this arte, among the which, Guido, Vigonius, and among the men of this age, Tagaltius being my fellowe in office, and my companion in my studies, haue done greate things and worthie of praise, in amplifying and garnishing this part, whereby it may be gathered, how much is vnto this art to be attributed, which so many renowmed, haue each one in his workes and monuments set forth, increased, and enriched, that men might know it to be most possible, and in effects most euident among all the partes of medicine.

Now must we show what are the duties and office of a Chirurgion, and how he should enterprise the same, for there be three cheefe points which pertaineth to a Chyrurgion, wherein all the whole reason of the arte seemeth to consist.

The first doth consist in seuering and separating that which is conioyned. The second is, in ioyning and bringing that to a good vnition, which is diuided. The third is in removing and taking away by incision, or otherwise, that which is superfluous. Moreouer, the Chirurgion vsing the continuitie,

nuitie, either by incision, by cutting off, by letting of blood, or by scarification: That which is diuided, he conioyneth by agglutination of wounds, and by restoring, of displaced bones into their place againe, and also by curing of Fractures, that is to say, broken bones. And he cutteth away superfluous mattier by taking awaie tumors against nature, & that by ŷ ministration of ŷ hand, as in extirpation diuers waies of Ganglia, Carcinonata, otherwise called Cancer, Scirrus, Nodus, Strumas, & other of that kind, either else in drawing of water out of the bellie in Hidrops, or else in cutting off a superfluous finger, when as there be fire or more vpon the hand, or else by taking awaie of Cataracts, which the Greekes call Ptirigion, or the web in the eies. For truelie these be the chiefe duties of a Chirurgion, and the operations, which he ought most truelie to execute.

Furthermore, that is, when he hath performed all these things, safelie, readilie, and quicklie, & with as little griefe as may be, and also without all fraude and deceit, Galen estæmeth to be the dutie of a Phisition that cureth rightlie, and that onelie regardeth the vtilitie of the sicke: For these be things which cannot otherwise be done by the arte of Medicine, & therefore they be most profitable in the common weale, and the artes thereof were had in most estimation in the olde time, as the auncient writers doe declare. Therfore so profit thou, saith Hyppocrates, in diseases, that thou hurt them not. This scope must therefore alwayes be had in those things, that the Chirurgion will endeuour to doe, that he profit the sicke, and take in hand the curation of diseases with good faith and honest, and with a beneficiall will towards his neighbour, and whatsoeuer he knoweth himselfe able to cure by the benefit of his arte, that let him enterprise to doe with all diligence, but inuinsible and incurable diseases, such are Oculti carni, Elephantiasis, and old Callous, hollow and fraudulent vlcers, let him not once attempt to meddle with, least he get the name of an euyll Surgion.

And further, because that we haue said, that a Chirurgion must safelie cure, there be three thinges worthie to be noted

noted, which Galen doth mencion in his xiiii. booke, De methodo medendi, vnto all the which the diligent Chirurgion, shal safely haue regard. The first is, that he diligently prosecute the perfection of his worke, which he doth enterprise, for the restoring the sick person to his health. The second is, if he may not obtein this scope, that at least he hurt not, the sicke person through his worke: for that is the precept of Hippocrates, lib. i. Epid. textu. 50. saying, Profit thou so in sickneſſe, that thou hurt not. The third and last is, that thorough diligent care, the disease do not easely returne again, for the ſtudie of the Chirurgion is, that he by operation, may remoue all the diseases and griefes which are in mans bodie, contrarie to nature: But if he cannot bring this thing to passe, then let him take his chiefe counsail of that learned sentẽce of Galen, how he should remoue these hurts. Moreouer, the cunning artiſt shall practise all things prosperously, if he will ſtudie to cure diseases, by their indications, which is a wittie beginning of things to be done, as Galen witneſſeth in his xiiii. booke, De methodo medendi, and the first indication, is the conseruation of those thinges which are in mans body, according to nature, and the remouing of those which are against nature.

Furthermore, those thinges which be in mans bodie according to nature, are kept by the like vse of their lyke, & those which be against nature, are driuen forth by their cõtraries, and that if the disease doe nede ſuch mete curation: But notwithſtãding, it is moſt certaine, that there are some diseases, which cannot be expelled out of the bodie. And we doe know them by this, when as the effect it selfe, of his owne nature, and whole assencie, doth refuse all orders of curing, as the disease Elefantiasis absoluta, & as men commonly call it confirmata, or else when the patient (although the disease be otherwise curable) shall continue ſuch helpes, as are to the curation necessarie, namely cutting away, as in Spaſelus, or else aduſtion or incision, where they shalbe nedefull: and the diseases of sicke men, are made for the moſt part vncurable, either by the tenderneſſe of the patient, or yelding to the disease.

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In like maner we doe call such diseases vncurable, whose curation doth giue an occasion of greater euil: As when we doe studie to cure Cancer, or endeuer to helpe dayly fluxis, of the Hemorodes, except one hemorode be left open: or olde vlcers, which haue had a long issue, for ỹ curation of these, doe bring for the most part, more daungerous diseases into the bodie of the patient: wherefore Hippocrates, in his first, xxv. viiii. and xii. Apoph. doth affirme, that it is best to leaue this disease, called Cancros occultos vncured, and so of olde hemorodes, except one be left vncured, for else it is more daungerous, for turning into a dropsie, madnesse, or consumpcion. And because we haue declared before the office of Chirurgerie, which can not be exercised without his fit instruments: Now we wil shew, what these instrumẽts ought to be, by the which a furnished artist, may exercise those thinges that belongeth to this arte, and those are generally two, that is to saye, thinges medicinall, and things manuall, of the first kinde are these, order of dyet, which must be had in curing of woundes, apostumes, vlcers, fractures, and luxacions: then letting of bloud, and purging, and also locall medicines, as ointments, emplaisters, fomẽtacions, pouders, Cataplasmatas, and other thinges of that kinde.

And seeing that great daungers doe chaunce, by appointing the order of diet, by ministring, of inward medicines, and by letting of bloud, if they be not wel administred, and doe both often, bring as well great infamie, to the Chirurgion, as detrement, to the sicke patient, it shall be mete for him to vse the councell of a man learned in the arte of medicine, in those thinges, by whose prescripcion, he may assuredly apply helpes to the healthy of the sick. For the prescribing of wholesome dyet, the omission of bloud, and the geuing of a solutiue medicine, belong to a maister in the arte of medicine. For these are helpes of great waight and importaunce, and such as require a man of great wisedome and iudgement, and of no lesse prudence and exercise.

Wherefore I can not but be greeued, for that I consider a great many men, to worke foolishly, let mee not say impu-

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dently, greatly delighting them selues in the onely dignitie of the Arte, not knowing what it meaneth, which doe oftentimes let bloud their poore patients, without any Indicatiõ, or councel, of one learned in the same arte, or of some graue and learned Phisition, but also they will geue inward medicines a gods name, a matter truely most worthie, of publike punishment. For as much as I haue seene many, by such their rash, and bold enterprises, brought into daunger, yea, and some haue I seene miserably languished and depriued of lyfe. Therefore let not that young Chirurgion, which would be esteemed worthie of his arte, presume to take in hande these thinges, without the councell of an auncient maister, learned in the same arte, or else a graue Phisition, such a one which is learned in the arte of medicine, the matter it selfe geuing also such libertie or time.

But otherwise, if there be no learned maister present, or that any present necessitie doe constraine the same, then truely, the younger Chirurgions may both let bloud, and also if neede bee, minister a medicine, so that he haue good erudition, iudgement and experience.

Moreouer the Unguentes, where with the Chirurgion ought to be furnished, and the same to haue alwayes in his salutorie; as these, Unguentum Basilicum, Unguentum Apostolorum, Unguentum Aureum, Unguentum Album, and Unguentum de Althea, as Basilicon, to superate and materate, and Apostolicon to mundifie and clense: Unguentum Aureum, to incarnate and to fill, Unguentum Album, to cicatrise, Unguentum de Althea, to cease dolour and paine, and to make soft.

Moreouer, as for emplaisters, pouders, fomentations, and such like, the expert Chirurgion, doth prescribe of them very many sortes, according to the reason of curing. And these are the medicinall instruments, pertaining to ỹ art of Surgerie. By ỹ manuall instrumẽts, ye shal chiefely vnderstãd instrumẽts of yron, very mete & most necessarie, to the Chirurgiõs vse, whereof some are to make incision or to cut of a thing, other some are to draw out, certaine are to search, also some be properly to stitch or to sow, and other some to

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make adustion, to cut or make incision. Forfices, Nouaculæ, rasorius, scalpellum, Chirurgicum, for Phlebotomie, seu, lancetam, forfipes to draw out, called commõly Tenaculæ volsellæ, seu volsellæ, which in French they call pinsettas, the crooked hoke, vncus seu vncinus, and that Pyon instrument which ỳ Grecians call Diopleum graphiscum, is apt as Celsus writeth, to draw out arrowes. For to serch, we doe fitly vse a probe, for to sow, a needell and a quill are properly vsed, and to adustion diuerse kindes of cauteries, commonly called actuall, are occupied, and for the variable meanes of their vse, they haue diuerse figures, and diuers names, for some be sharpe at the point, and other be not, and other cauteris, they call myrtea, oliuaria, dactilica, cultellaria, so called of the similitude of thinges, which these instrumentes doe represent, for the cauteris called Mirtia, doe imitate the figure of the leaues of Mirtills, Oliuaria, of an Oliese, & dactilica, of the Date, as Cultellaria, doth represent the forme of a knife, these are the common instruments necessarie for Chirurgions. There are certaine other instruments proper and appointed to certaine partes of the bodie, as modioli, which the common Chirurgions call Trepans, malleus, scalpri, and the same are conuenient to scrape, cut, or pul out bones, as well of the head, as other parts, euen as Falx is proper to the fundament, speculum oris, to the mouth, and speculum matricis, to the matrise, there are innumerable other sorts of instrumentes, conuenient to draw out dartes, gunshots, & other infixed things, whereof to speake I doe now cease, and will prepare my selfe, to set out a Chirurgion, what maner a man the best Chirurgiõ should be, which thing, I often times haue declared to be the chefe effect of the matter, for wee know what Galen hath saide, of the Phisition, as well in his booke, De institutione artis medicinalis, as also in the third booke, de naturalibus facultatibus, and in his third & fourth, de methodo medendi, (Galen calleth him that cureth woundes and vlcers, medicus, that is to say, a Phisition) he saith, that ỳ Phisition ought to be prudent and well exercised, and also he ought to be of quicke nature, and of pregnant wit, that he may promptly ob-

obtaine all things, and verie well instructed in learning, and moreouer appointed to the best maisters to learne of, and one induring labor & paine, a great louer of the truth, & studious, and most deeplie vnderstanding his art, approued by much vse and long experience: and all this (saie I) must be applied to the Chyrurgion, which will bee most excellent, & esteemed for an vndoubted Artist: but beside these, there be certaine things which doe pertaine priuatlie to a Chyrurgiõ, as to ỳ manual Artist, & do not so much pertaine to the ancient maister of the art of Medicine, for a Chyrurgion ought to be a young man, or els but little past youth, that is, betweene the same, and auncient mans estate, for ỳ age flourisheth most in sense & strength, to exercise rightlie whatsoeuer belongeth to his art, (wherfore they which are aged men cannot so aptlie bring things to passe which arte requireth, for the imbecilitie of their senses, for they follow them rather by counsaile.) Furthermore, he must haue a sure and strong hand, and steadfast to all workes that hee shall doe, whether it be to make incision, adustion, & also for the cutting awaie of a member. Also it behoueth him to haue a quicke and cleere eie, and he must not be fearefull of mind, but rather without pittie, if he do intend to cure him that he taketh in hand. Furthermore, neither let him make the more haste, neither let him cut Canteries, or cut off lesse than nede requireth, for the clamor or crying out, or for the tenderneste of the sicke Patient, but let him doe all things as though he heard not the clamors of the sicke, neither let his minde be therwith anie thing troubled: And wee haue declared that a Chyrurgion ought to excell in learning, for therein chiefelie doth his erudition manifestly appeare, if he vnderstand exactlie both the Theorike and the Practike parts, that is to saie, to know things naturall and not naturall, and also those that are against nature. Also if hee know what be the causes of wounds, vlcers, fractures, and luxations, with their accidents, and also what be their conuenient remedies, and how to remoue the same: In lyke manner he shall excell in practise, if hee haue had much and good exercise in the operations of his Arte, by working

spædelie, trimlie, and readilie, & consulting with the auncient maisters of the same arte, in those things that pertaine to Pharmaceuticen & Diateticen. And although he vse those things which be searched out by reason, & confirmed by frequent vse, wherein truelie the faith and honestie of a Chyrurgion seemeth chieflie to consist: The Chyrurgion ought to be as it were, of a natural disposition, in the right & easie obtaining of things w̄, that he hath to do, of a stedfast memory, of a quick remembrance, handsome in his doings, of a good iudgement, diligent and apt in searching, or inventing remedies: but chieflie of all, as concerning manners, let him be deuout, or religious towards God, mercifull of minde, and vnfearefull in sure things, and such as must needes bee done, and in things doubtful and perillous, he must be warie and not to rash, in like maner he must be familiar, gentle, and pleasant towards his Patients, milde & tractable amongst the brethren of his Arte, and as the Grækes do call him Philectaros, that is to saie, a louer of his companions. Also he must be prudent, very circumspect, and slow in prognosticating, not a grædie catcher, chast also and temperate, not couetous of monie, for he which doth exercise the art of Chyrurgerie rather for lucre sake & desire of gaine, than for anie good will toward his neighbour, he is no right Chyrurgion, but as it were, borne out of time, and thus I make an end. Thus farre I haue declared vnto you the saying of Valleriolus that learned man. But forasmuch as some men doe more regard the authorities of authors, than they doe the true iudgement of reason and experience, which two are the foundation of all Artes, and wil alleadge and saie, this is but his owne inuention, wherfore I wil not beleue him, though it appeare neuer so much to be reasonable, that I credit one or two mens sayings, that the art of Chyrurgerie is so auncient, or that the instruments appertaining to the same art, is diet and medicaments, no I will not beleeue it, for those instrumentes doe pertaine onelie to Phisicke, and not to Chirurgerie, for the instrumentes of Chyrurgerie be onelie outward medicines, as Plaisters, Unguents, oiles, pouders, &c. with a great many of yron instruments

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ments fit for his art, wherefore I am not bounde to beléeue Franciscus Valleriolus. The answere. My friend, hast thou so some forgotten Hyppocrates, who confuting all dispearsed sects, did conclude, That diet, wherein consisteth the gouernment and nourishment of the sicke man: That purgations being necessarie for the euacuation of euill humours. And also outward medicines, as plaisters, vnguentes, oyles, balmes, &c. That all these three were united together by the authorie of Hyppocrates, and that in no case they might be separated one from another, if we wil rightlie cure the body of man, and follow a right method, which method Hyppocrates hath constituted and set forth, and willeth all men to follow the same. Then I saie, either we must breake Hyppocrates precepts, and by that meanes grow into ignorance againe, either else we must follow the true and right method, set out by him, wherein he did vse all these instruments generallie and indifferentlie, as time and cause dyd require.

And also Galen, as it may more at large appeare in his fourth booke De Methodo Medendi, & in his bookes of purging medicaments, where he doth confute diuerse Physitions, which woulde not admit purging medicines in outward diseases, as Asclapiades, &c. Saying, That purging medicaments are necessarie to be vsed, where there be great and daungerous wounds, and where there be great accidents that chanceth vnto the same, to purge & draw awaie the superfluous quantitie of those humours, which might hurt the grieued part, or hinder the curation thereof, as he doth declare in the same booke De Methodo Medendi. And he saith in his bookes of purging medicamentes, That purgations are needfull for the curation of Cancers, Herpis, Erisipulas, Spasalus, Gangrena, and many other outward griefes which chanceth vnto mans bodie. And he doth affirme, ỳ without these things, he could not haue brought to health his diseased patients. Thus it doth manifestly appere both by Hyppocrates & Galen, that these be not onelie generall instruments, but also common instrumentes, and therefore of necessitie must be vsed, either else ỳ Chirurgion must leaue these euill

affects vncured, which he ought take first to indication off. Obiection. Yea sir, you saie verie well, for in the time of Hyppocrates and Galen, the Chyrurgions were Phisitions, and were great learned men, and vnderstode all partes of the arte, and the nature of Medicines both simple and compound, wherefore it was lawfull for them to vse all these instruments generallie & indifferentlie, but it is not so, for our Chyrurgions, and that I will proue by the authoritie of Tagaultius, in his institution of Chyrurgerie. The aunswere. You haue sayd verie well sir, and by him I am verie well content to be iudged, for he is both a man of excellent learning, and also worthie to haue perpetuall fame, for his painfull trauaile in that excellent booke of Chyrurgerie, & that we may the soner come to our purpose, I will recite a few of his sayings, whereas he declareth what the art of Chyrurgerie is, and what manner of man hee must be, and what properties he must haue, that ought to vse the same arte, how he should be trained vp in the same art, and what is the subiect of the same, and what be the things that he must cure the same subiects with, & with what instruments the same must be cured.

Now I will recite you certaine sentences, as hereafter followeth, which are taken forth of the same booke of Tagaultius, that you before haue alleadged, and I trust being well and indifferentlie construed, shall make more with my sayings than with yours.

The vvordes of Iohannes Tagaltius, declared in his booke vpon the art of Chirurgerie.

TO the exact knowledge of the arte or science, which is called Chyrurgerie, it behoueth ỹ Artist to know foure things. First, what Chyrurgerie is, what is the matter subiect to Chirurgerie, what is ỹ end of Chirur-

Chirurgerie, and also what order is to be obserued & kept in the learning of Chirurgerie. And we doe knowe what Chirurgerie is by three manner of waies. First, by the Etimologie of the word or name, by his definition, and by his diuision: Chirurgerie after his Etimologie, is called the operation with the hand, for it is named Apo tes chiros, cai tou ergou, that is to saie, of the hande, and his worke, because this Arte is exercised by the administration with the hand, and hereof commeth it to passe, that the minister with the hand is called Chirurgus, that is to saie, a Chirurgion: Chirurgerie according to the assentiall definition, is an Arte, which by the administration of the hand, doth expell & driue awaie sickneſſe out of mans bodie, whereof chiefliе & principallie it taketh cure and charge, or else Chirurgerie is an art, which by the cunning working with the hand, doth put awaie or remoue the sicknesses or diseases of mans bodie. The matter subiect to the art of Chirurgery, & the whole intention which the Artist doth occupie himselfe about, is onlie mans bodie, subiect to diseases & infirmities, which diseases and infirmities requireth the help of medicaments, ministred by the hand: For all things that the art of Chirurgerie doth finde out either by reason or experience, it teacheth the same to be done by the administration of the hand, to the vtilitie & profit of mannes bodie. Furthermore, Chyrurgerie is diuided into two parts, that is to saie, into Theorike and Practike. The Theorike part doth teach, and is a science obteined by demonstration, & by knowing the principles of the art. This part a man may haue, although hee neuer exercise or practise anie parte of the same, as the learned Phisitions and other learned men which dailie readeth the principles of Chirurgerie: But the Practike parte of Chirurgerie, is an arte which doth rightlie and readilie, by the administration of the hand vse such things as are inuented amõgst mechanical arts, which part no man can be perfect in, except he be brought vp and exercised in the same. And doth both continuallie see other expert men worke in the same arte, & diligentlie obserue such things as he doth see wrought.

Now these two partes are commonlie exercised about these grieses, with their accidents, that is to saie, tumors against nature, grene wounds, vlcers, fractures, & dislocations, with such like, which requireth the helpe of the hand. Therefore ther are required foure things in a good Chyrurgion: first, that he be learned & verie skilfull in the principles of his art: secondly, ỳ he be wel brought vp vnder some cunning man, & wel experienced: thirdly, ỳ he be ingenious & wise: fourthlie, that he be of good & honest manners, and of a vertuous life. The erudition and learning of a Chyrurgion doth consist in knowledge of naturall things, thinges not naturall, and things against nature. The experience of a Chyrurgion doth consist in those thinges that are found out by reason, and confirmed by dailie vse and experimenting of them, for otherwise he will bee accounted a rude emperike, which ioyned not reason with experience. To be ingenious and wise, it is verie necessarie, for he ought to haue a readie wit to conceiue things, and a firme memorie in calling of them to remembrance, a discrete and right iudgement, an excellent perfection in working, a diligent and readie wit in inuenting and finding out of remedies to helpe his grieued Patient withall. The manners and conditions required in a Chirurgion, is boldnesse, and a minde voide of feare, in necessarie things, and in the time of necessitie, and not to be to rash in matters of doubt and perill, gentle and milde towards his Patients, and to these of his profession, to be curteous and gentle, yea, and as the Grekes call him Philitairos, that is a louer of his fellowes, he ought also to be prudent and circumspect in prognosticating, vertuous and temperate of life, mercifull toward the poore, and not gredie of monie, hauing these properties, hee may procede orderlie in learning the art of Chyrurgerie: and the order to be obserued in the same, is to begin with easie things, (or as we may tearme them) common things, to perticular, or from vniuersal things, to those that be lesse vniuersall, also from things most manifest and knowen, to things more obscure, darke, and vnknowen.

Hetherto we haue spoken of that part which doth appere

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taine to the knowledge of Chyrurgerie, and now we will intreate of the execution and operations of the same. The operations which a Chirurgion executeth about the bodie of man, if he may bring to passe his intended scope and desired end, are three, that is, to diuide and separate things contayned, to ioyne and vnite together that which is diuided, & to take awaie that thing which is superfluous. We diuide and separate that thing which is contained by incision and excision, and by letting of blood and scarification: we doe also ioyne and vnite together that which is diuided, by consolidating of wounds, and restoring of members dislocated, into their proper places, and curing of fractures. We take awaie that which is superfluous, by remouing of tumours against nature, as Ganglia, Nodus, Cancers, Strumas, Mirmecias, and by drawing of water out of the bellies of such as haue the Dropsie, or by cutting off such members as be superfluous, and to doe these things quicklie and readilie, with a good zeale toward his patient, and not to make anie vaine promises for monie, or to take in hande those grifes which cannot be cured, and that he may more perfectlie, readilie, and safelie, doe those things, it is requisite that he doe consider three speciall indications, according to the saying of Galen, if is to saie: First, the conseruation of those things which be naturall, and the expulsion of those which be against nature: The second indication sheweth whether we may bring to passe and fulfill that which the indication doth require, that is, whether we can conserue that which is natural, and take awaie that which is against nature: The third indication is that which findeth out remedie, & doth declare vnto vs with what things we may accomplish that which the first indication requireth, and the second giueth leaue to be done: touching the indication which consisteth in the conseruation of naturall things, they be fiue, that is to saie, health, or a naturall aptnesse, in doing the actions.

The cause of health, the effects of health, which is the action according to nature: strength, which doth alwayes contend against sickness: custom which is like another nature:

6 Complections and temperaments which are to be conserued and kept, be their like. Nowe, for those things which be against nature, which we ought to expell and driue awaie, are three in number, that is, sickneſſe, which is an effect against nature of it selfe, and first hurteth the action, the cause of sickneſſe, and the accidents, or Symptomata, which followeth the sickneſſe, as the shadow doth the bodie: All these things are cured and put away by their contrarie, but forasmuch as the expulsion or curation of things doth principallie consist either in simple or in compound things. Note, that which is simple is cured by his contrarie, & that which is compound, by their contraries.

Solution of vntitie,	by	Vnition,
Heate,		Coldneſſe,
Coldneſſe,		Heate,
Drineſſe,		Moiſtneſſe,
Moiſtneſſe,		Drineſſe,
Superfluous, quantitie,		Diminution,
Quantitie diminiſhed,		Augmentation,
Abounding, in number		Taking awaie,
Number diminiſhed,		Putting to,
Obſtruction,		Opening,
Straightneſſe,		Inlarging,
Inlarging,		Aſtriction,
Figure altered,		Reduction to his forme
Luxation,		Reſtoring to his place,

In like manner in compound ſicknesſes, we muſt both conſider the contrarietie of euerie ſimple ſickneſſe, and alſo in applying apt and conuenient medicaments for the ſame: But the indication for applying remedies is taken of that ſickneſſe, which muſt firſt be cured, and that whoſe cure is the curation of another, and that without whoſe cure, the other cannot be cured, yea, and that which moſt grieueth the Patient, and is moſt dangerous, is firſt to be cured. The ſecond indication is that which ſheweth whether we may bring to paſſe that which the firſt indication doth require, &

is to conserue things naturall, and to expell those that be against nature, therefore this indication is taken of thinges naturall, as whether health may be restored or not, & whether the strength of the patient sufficeth for life or not, and whether the cause of health may be conserued, and so of the rest. The indication taken of things against nature, is whether we may cure the sickenesse, with his accidence or not, & whether we may resist the cause of these two, or not, & this is to be knowen three waies. First, when the sickenesse of his owne proper nature is incurable, as Elephantiasis absolute, and as they tearme it, confirmed, or when the sicke patient refuseth his necessarie remedies, when the diseases are curable. As for example, the cutting awaie of a member, in which there is a Cancer, &c. Or when the curation bringeth a worse and more perillous disease, as olde Cancer being cured, or continuall Emorodes, for if you cure these, there is daunger of life, or of madnesse, or of consumption. Nowe, the third indication doth teach conuenient remedies for their curation, their vse, and instruments, wherewith it is brought to passe.

The first of these instruments is an apt diet or regiment in ÿ vi. things not natural. The second is, Pharmacon (which he vnderstandeth for purging medicaments.) Also letting of bloud, with plaisters, vnguents, pouders, &c. But in the two first, the Chirurgion must consult with the learned & graue Phyſition. There be many yron instruments, beside these medicinall instruments, which be both proper and common for this arte, as hereafter followeth.

Thus farre we haue spoken the wordes of Tagaltius, as they be set forth in his booke of Chirurgerie, as well for his definition of Chirurgerie, as for the antiquitie thereof, and also what manner of conditions hee ought to haue, what learning he ought to be brought vp in, and what he ought to learne first, and what last, and what is the matter or subiect proper to his art, and what instruments the artist must haue, both common and proper, to finish and bring to passe withall his desired scope and end of his worke, which is the curation of mannes bodie in those thinges that hee hath

charge of. This is the effect of the words of Franciscus Valleriolus, as well as of Iohannes Tagaultius, as it may appeare in their words here aboue written. Now my friend, where you did alleadge Tagaultius, to proue ỹ a Chirurgion ought not to minister diet and Purgations, neither yet anie inward medicines, for that you saie, it doth properlie appertaine to Phisicke, it seemeth to me by the wordes of Tagaultius, that it maketh little for your purpose.

Obiection. No sir, by your saying both Valleriolus and Tagaultius saith the contrarie, doe not they saie, that a Chirurgion ought not to giue inward medicines, without the counsaile of a Phisition? and declareth what inconuenience hath come by the vndiscrete ministring of the same? I take this to be a sufficient proofe.

The answere. No not so sir, we may not confound the instruments, which are necessarie to an Arte, because that some Artists doe abuse their instruments, neither Tagaultius nor Valleriolus meane so, but their meaning was, that those that did practise the Arte of Chyrurgerie, which dyd not vnderstand or knowe the principles of their arte, neyther the causes of diseases, nor yet the diseases themselues, nor how to take indication for the curation, neither yet knoweth the nature of the medicines which he doth minister.

These be they that Tagaultius and other learned men do reproue, which I must needs confesse, ought not onelie to be forbiddē in inward medicines, but also outward medicines, for if I should speake of all mischiefes that hath bene done by the applications of outward medicines, how some hath bene maimed and vndone for euer, and other some brought to death, the number of them would seeme verie strange vnto you, and therefore we will let it passe at this time, with praier vnto almightie God for his mercifull helpe herein, that he may moue the hart of the Prince, with the Magistrates of this Realme, to take such order for the safegard of the people, and for the honour of this Realme, & for that that learned men may be the better incouraged to studie this arte. But as concerning the instruments, there is nei-

ther

ther these two men, neither yet anie other before their time, since the time of Galen, that hath forbidden the vse of them to the Chirurgion, for both these men doth put thē in their bookes, as most common and special instruments, affirming them as most speciall instruments pertaining to the art of Chirurgerie, that without these, those euill and vicious humours that hindereth the curation of vlcers, tumours against nature, &c. cannot be purged awaie, neither can the temperaments & other naturall things of the bodie be kept in perfect state, without an apt and méete diet. But for to counsaile with the Phisition, being a graue and learned man, in the principles of this arte: In matters of waight, I take it to be verie necessarie, for what is he that is wise, that will refuse the counsaile of a wise and a learned man, and speciallie of him that professeth the principles of the same arte, for Phisiologia, whereof the Phisition taketh his name, is the first and chiefest parte, which he that worketh in the art of medicine doth proue, for that it doth consist in the knowledge of the seauen natural things, and in the residue thereunto appertaining. But yet this doth not followe, that a learned an expert Chyrurgion should not vse diet and Purgations, and other inward medicines at all times when nede doth require: for if you would so vnderstand it, one part of their sayings should repugne against another, and so confound the whole, but their mening was, that the vnlearned Chirurgions, and these that be younge men, which be not well practised, that they shoulde take counsayle as well of the learned Phisition, as of the learned Chyrurgion, for this Arte is so ioyneed togeather, that neyther maye the partes bee diuided, neyther yet the Instrumentes, without the ouerthrowe and destruction of the whole Arte, for it was neuer perfect before the time of Hyppocrates, till that he ioyned all these partes and Instrumentes together, and taught a perfect methode and waie of curing, by a right vsing and ministring of the same.

For my part I haue read many authors, not onelie of Greciane, but also of Arabians, as Rasis, Auicen, yet could I neuer

neuer finde, in any of their bookes, that they doe worke of Chirurgerie, where they doe leaue out dyet and purging medicines, & apointing the Chirurgion onely to cure with outward medicines, for I am certaine, ỹ in all their scope of curing, both of tumors against nature, of vlcers, &c. That their first indication is, to take away those euell affectes, which may let the curatiõ, (that is to say) to remoue away these euell humors, which might repaire vnto the greued part, and also to alter such distemperatures, by conuenient dyet, and other thinges, as might be hurtful vnto the same, and then to proceede with locall remedies, by outward application vnto the greued part.

This is Galens doctrine also, that no strong medicine shalbe outwardly applyed, for the resoluing of inflammations, before the bodie be purged. And furthermore, in virulent, and malignant vlcers, which Galen nameth Cacoethe, and where the bodie is full of euill and vicious humors, which humors, Galen calleth Caccochimia, these saith Galen, must be purged away, before we proceede to the cure of the vlcer, for otherwaies, the vlcer may not be cured, and if it bee, it wil come againe, either in the same place, or elsewhere in some other, or else the same humors not being euacuated, may be the cause of some other greater disease, in the body, worse then that which was cured, wherfore Galen doth reprone Thefalus, in his fourth booke called Therapeuticon, saying, Thtfalus got him about to cut away the lippes of the vlcer, & to apply his Malagma, of Mustard seede, by meanes whereof he hath inflamed all the parte, and made the vlcer worse, then it was before, not taking any indication of the affect, neither yet of the cause thereof, by meanes whereof, he committed great errour, as Galen doth say, and was accompted for a rude emperike, and for an vnskilfull Phisition.

Obiectiõ. Why sir, it seemeth to me, by your wordes, and by the saying of these men, ỹ be learned in the arte, that Phisicke and Chirurgerie are both one arte, and I will assure you, if these wordes be true, which you recite of Hippocrates and Galen, that they were both Phisitions and Chirurgions, and vsed all the whole arte together, then I must needes

mẽdes conceãue, that the vsing of all these partes together, made them so excellent men, and of such notable fame, and that your deuiding the arte in two partes, and exercising the same seuerally, hath made you that be both Phisitiõs and Chirurgions, vnexpert, to the greate detriment, and ill report of the whole arte. Wherefore I most hartely desire you, for that ý I may know, both the art, and the artist the better, to declare the diuision of these fiue parts, which you haue spoken of before, perteining vnto these artists.

Sir, I will right gladly doe the best that I can, to satisfie your desire, although I haue not that learning, in the Greeke and Latine tongue, which I would wish for your sake, that I had, and also which this arte doeth require in him, that shall precisely set forth the same, yet with the little learning that I haue, and according to reasõ and experiẽce, which two be the foundatiõs of euerie arte, as Galen doth say in his third booke, de Methodo medendi, I will doe my indeuour, to declare vnto you these parts, in as few words as I can, desiring you to accept my good will, and if I haue left out any thing, by the reasõ of ý briefenesse of my writing, which other learned men doe finde fault with all, thẽ I most heartely desire them, both for curtesie, and humanitie sake, to amend the faults that they shall finde, and in so doing, they shal not onely be profitable to the cõmon welth, in the furtheraunce of this arte, but also bynde mẽ during my life, to honor them, serue them, and loue them, and incourage mẽ to take further paines, to the vttermost of my power.

Now that wee may accomplish our former talke, as concerning these fiue parts, pertaining to the arte of medicine, which haue bene set out, by these names, of the auncient Phisitions, long before Galens time, as I haue declared vnto you before.

The parts. { Phisiologia. / Pathologia. / Hygiena. / Semiotica. / Therapeutica. } Partaining to the arte of medicine.

he must be conuersant with the partes pertayning to the arte of medicine

The

The first part called Phisiologia, is that which doth cõsider the vii. naturall thinges, whereof the bodie of mãn is made, as Elementes, temperaments, humours, members, spirites, vertues, and operations. The Elements be foure, as Fier, Ayer, Water, and Earth. The humours be foure, also: as Bloud, Choller, Flegme, Melãcholy. And the temperaments be foure likewise, as hot, colde, moyst, and drye. These foure are the matter, whereby all the members of the bodie are made with, the temperamentes, and spirites, therein conteined, and he that shall cure the bodie of man rightly, must chiefely vnderstand, how to cõserue euery one of these, by their like, and to expel and remoue from them, their contraries. For the knowledge of these, it doth behoue the artist to haue long experience, and chiefely in that part, which wee call the Anathomie of mans bodie, which is the deuiding and seperating of dead bodies, that wee may therby vnderstand all the partes of the same bodie, with theyr position, figure, number, place, nature, temperature, office, and affects, and also to know their names, and true diuisions, and which be similer, and which be compound, and instrumentall, for of the simuler and simple members, the compound are made.

Simuler parts, be these, bones, cartilages, ligamentes, membranas, or panicles, flesh, nerues, arteries, veines, fatnesse, and the skinne. These be called simuler parts, whereof the instrumentall or compound partes are made, and some requireth more of these, and some lesse, according to the necessitie of the member, for some member doth require all these, and some doth not.

The compound or instrumentall members, be the head, the heart, the liuer, the legges, the eyes, and all other like. Which member both simuler, and compounde, the Chirurgion ought to know, with their natures, temperatures, and actions, and their other necessarie properties, or else he cannot rightly cure them, when they are greued, and hurt. But in the curing of them that be hurt, he shall distemper them that be quiet, for how can he conserue the right temperament of any thing, whose temperature he knoweth not,

not, that is vnpossible, except it be by chaunce, as the blinde man shooteth at a Crowe, and hitteth one by misfortune, or as Galen doth compare him, which knoweth not the partes of mans bodie, with their nature, vnto a blinde Carpinter, which cannot see his worke, cutting more or lesse, then is necessarie, by meanes whereof, his worke doth neuer come to a good perfection. Therefore, who so euer is not expert, as I haue saide before in the temperamentes, and natures of these parts, he can neither cure woũds, nor vlcers, neither yet any other thing rightly, neither can he tell by what way the vlcer, or wound shalbe cured, neither whether it may be cured, or not, neither yet, whether any cause doe remaine, that may let the curation, neither how to remoue the same, nor whether nature and strength, may suffer the same causes to be remoued, nor how to maintaine the strength, and temperaments of the same bodie, for he being ignorant in these seuen naturall thinges, whereof the bodie of man consisteth, which bodie being subiect to the arte of medicine, he must of necessitie I say, be also ignoraunt, not onely of the preseruation of health, with his temperaments, but also to be ignoraunt in the curation of hurtes, and diseases, which chaunceth vnto our bodies.

Wherefore in fewe wordes, I haue proued here, bothe by reason and by experience, that the knowledge of this part named Phisiologia, doeth chiefely, and specially, apertein to the arte of Chirurgerie, and without the knowledge hereof, we shal neuer rightly, or methodically, cure any maner of woũd, griefe, or disease, neither is he worthie to take the name of a Phisition, neither yet of a Chirurgion, but to be called by the name of an Empyike, or experimenter, curing onely by chaunce, without any reason, but euen as the blinde Carpenter, which Galen hath spoken of before, sometime cutting to much, and some time to little, and many times marring all his worke, for want of skill, ere that he beware.

Now to conclude, for this first part, he that will be further instructed herein, let him reade Hip. de natura hominis, humoribus, elamentis, de natura & formatione fetus, & many other

other bookes of Hyppocrates, and chiefelie that where he diuided the similer parts. As Osteotome, that is to saie, the diuision of the bones, Condrotome, the Cartalages. Syndesmotome, the ligaments, Arteriotome, the Arteries, Phlebotomæ, veines, Neurotome, the nerues, Miotome, dividing of the Muscles, Tenontotome, the tendons, &c. There be diuers other bookes of Galen, which be verie profitable to be read for this matter, as his bookes of Anathomie, also his bookes De temperamentis, de optima corporis constitutione, de facultatibus naturalibus, de placitis Hippocrates, & Platonis, de motu musculorum, de causis respirationis, and manie more worthie bookes of his, which we will let passe. There bee manie other bookes also, written by diuerse men, as Guido and other, which doe intreate of these naturall things, and specially of the Anatomie of mans bodie, and for that you may the easilier & better vnderstand these naturall things which euerie Chirurgion ought to know and haue in perfect memorie, to that end he may remoue those things which doth hurt them, or let them of their perfect operation, which you may easilie knowe if you vnderstand their natures and properties, & figures, &c. Which Table followes hereafter, as you may beholde.

Elements

- Eelements be foure,
  - Fire.
  - Aire.
  - Water.
  - Earth.
- Temperaments.
  - Simple be foure,
    - Hot.
    - Colde.
    - Moist.
    - and Drie.
  - Equall one,
    - Hot and drie.
  - Cõpound be foure.
    - Hot and moist.
    - Colde and moist.
    - Colde and drie.
- Foure humours,
  - Sanguine.
  - Flegmatike.
  - Cholerike.
  - and Melancholie.
- Naturall things.
  - Members,
    - Similer.
      - Bones, veines, arteries, cartilage, flesh, fatnesse, pannicle, ligament, nerues, and skinne.
    - cõpound
      - Head, heart, liuer, lungs, armes, and legges.
- Three facul-ties.
  - Animall.
  - Vitall.
  - and Naturall.
- Operations or actions.
  - Animall
    - Feeling.
    - and mooving.
  - Vitall,
    - Beating of the pulse.
    - And breathing.
    - Generatio.
    - Auctio.
  - Naturall
    - and Nutritio.
- Spirites be three in nũber
  - Animall
  - Vitall.
  - Naturall
  - In
    - The braine.
    - The Heart.
    - The Liuer.

Pathologia is that part of the arte, which hath the knowledge of sickneſſe against nature, with their Symptoma and accident, and they be thrée in number, that is to saie, sickneſſe it selfe, the cause of sickneſſe, and the accidents, which followeth after sickneſſe: sickneſſe it selfe may come two waies, either of outward causes, or of inward causes, we do commonlie call the outward causes primatiue, the Grækes call them Cathertica, the inward causes, we do cõmonlie name Antecedent, or Internam. The affectes commonlie followe these causes, and if the affectes come of outward causes, then commonlie they be wounds, contusions, fractures, dislocations, biting of mad dogs, & of serpents, &c. If they come of inward causes, then they make tumors against nature, as Phlegmõ, Erespula, Oedema, Sirrhus, with many kinde of malignant and stubburne vlcers, to be cured, which tumours and vlcers cannot be made whole, except their causes with their euill affects, may be removed and taken awaie: I suppose that there is no man, but hée will iudge this part of the art chieflie to pertaine to Chyrurgerie, for that it taketh cure of wounds, vlcers, and tumors against nature, as I haue said before.

Then if this part doe appertaine to the art of Chyrurgerie, as it is most certaine it doeth, it behoueth the Chyrurgion perfectlie and rightlie to vnderstand what kinde of sicknesses there be, with their differences & names, what partes of the bodie these sicknesses may be in, and what manner of sickneſſe it maketh in the same partes. As for example, euill complection maketh a distemperature in the similer parts, & euil constitution, or euil cõpolition, maketh a deformitie or imbecilitie in the instrumentall partes. And solution of vnitie or continuitie, chaunceth both in the similer partes, and instrumentall. And all these doe appertaine to the Chirurgion, to haue most exact knowledge of, for he that taketh vpon him to cure an vlcer or a wound, or anie other manner of griefe, and doth not know the nature of the parts, neither yet what part it is in, neither yet the cause, neither how to remoue ỹ same cause, it is vnpossible, as I haue sayde before, that he shoulde cure the same griefes

griefes or diseases rightlie. And therefore these blinde emperikes that haue neither reason nor method, to leade them to doe those things which they dailie doe, I saie, their doings are so pernitious, that many people taketh great hurt thereby (shall I saie hurte) nay rather brought to vtter destruction, and many times to death. The Symptoma or accidents which followeth sickneſſe, is also diuided into three partes. The first is, the qualitie being altered, as with vehement heate in Phlegmon. The action or function hurt, but not vtterlie depriued. The action vtterlie depriued and taken awaie. For these causes aboue rehearsed, it is speciallie required, that a Chirurgion shoulde be learned, and also to haue greate experience, that hee maye rightlie iudge and discerne one disease from another, with their natures and causes, to the end, that when you come to the curation thereof, you may take right indications, what to do first, what next, and so forth to the end, for other waies you may applie medicines nothing fit for the purpose, but those that might doe great harme, and you might also applie those first that would be applied last, and those last which should be applyed first, and in the end marre all your workes, as the blinde Carpenter doth. Thus farre I haue proued for Phisiologia, to be one part of Chyrurgerie, or of the Art of curing, as we may tearme it, and I thinke there is no man that will count him to be a right Chyrurgion, that lacketh this part of the Arte, or that is not verie expert in the same. And for the further knowledge hereof, there be certaine bookes appointed of Galen, and other auncient writers, that you may reade concerning the same part as hereafter followeth.

Libro Hippocrates, de Morbis, libro Epedimiorum Hippocrates, Galen de locis affectis, Galen de Morbis & Symptomatis, & de 4. temporibus morborum, Galen de differentijs morborum cauſis, & Smptomatis, Galen de inequali intemperie, Galen de arte Medica, Galen de tumoribus, preter naturam, Hippocrates de Vulneribus vlceribus, & Fiſtulis, fracturis, immorodibus, &c. And also Galen in his whole Worke called Therapeuticon,

and in another worke to his Disciple Glaucon; as it is manifest to be séene. These two most excellent men béeing the patrones and fathers of the arte, haue written most excellentlie and perfectlie of many diseases, as woundes, tumours against naturne, vlcers, and many other diseases appertaining to the same art, as it maye more manifestly appeare in these bookes aboue rehearsed, and in manie other more of their workes. If I shoulde write of all men that accounteth this a proper and a principall parte of Chyrurgerie, then I must néeds confesse the truth, all men learned in this art since the time of Galen, haue so written, and so taken it. Thus I conclude for this parte, that hée that vnderstandeth it not, ye must giue him a baser name, ye may not call him a Chirurgion, that neither knoweth the principles of his arte, neither yet the nature of his subiect that he worketh vpon.

I remember when I was in the warres at Mutterell, in the time of that most famous Prince, King Henrie the viii. there was a great rablement there, that toke vpon them to be Chirurgions, some were sowe gelders, & some horse gelders, with Tinkers and Coblers. This noble sect did such great cures, that they got to themselues a perpetual name, for like as Thessalus sect were call Thessalions, so was this noble rable for their notorious cures, called Dogge leeches, for in two dayes they did commonlie make their cures whole and sound for euer, so that they neither felt heate nor cold, nor yet no maner of paine after: but when the Duke of Norfolke, who was then generall, vnderstood how the people did die, and that of smal woundes, he sent for me and certaine other Chirurgions, commaunding vs to make search how these men came to their death, whether it were by the grieuousnesse of their woundes, or by the lacke of knowledge of the Chyrurgions, and we according to our commaundement, made search throughout all the camp, & found many of the same good fellowes, which toke vppon them the names of Chirurgions, not onelie the names, but the wages also: we asking of them whether they were Chyrurgions or no, they sayde they were, we demaunded with

whom

whom they were brought vp, and they with chameleſſe faces would auow were, either with one cunning man or another which was dead: Then we demaunded of them what Chyrurgerie ſtuffe they had to cure men withall, and they wold ſhew vs a pot or a bore which they had in a budget, wherein was ſuch trumperie as they did vſe to greaſe horſe hæles withall, and layed vpon ſcabbed horſe backes, with neruall, and ſuch like. And other that were Coblers and Tinkers, they vſed ſhoomakers ware, with the ruſt of olde pans, & made therewithall a noble ſalue, as they did terme it. But in the end this worthy rablement was committed to the Marſialſie, and threatned by the Dukes grace to be hanged, for their worthie dæds, except they would declare the truth what they were, and of what occupations, and in the end they did confeſſe, as I haue declared to you before: wherevppon the Dukes grace gaue commaundement that they ſhould auoide the Campe in paine of death, and if at anie time they came within the Campe afterward, they ſhould immediatlie be hanged, as murtherers, his Grace calling them by the name of Dogge læches, commaunding his Captaines that they ſhould entertaine no more ſuch.

Thus you vnderſtand by what name thoſe men were then called, which toke vpon them vnworthilie to vſe this Arte, knowing neither the principles of this arte, neither yet the nature of the diſeaſes, nor yet the medicamentes wherewithall they could cure the ſame diſeaſes.

Thus we conclude with theſe examples before, that it is neceſſarie for a Chirurgion to know theſe partes, or elſe not to be admitted to ſo worthie an Arte, which doeth take charge, not onelie of mans health, but alſo of their liues and lims. And thus we end this part.

Eugiena is the third parte, pertaining to the art of Chyrurgerie, or Medicine, as we haue ſayde before. This part doth conſiſt in the ſixe things not naturall, called Res non naturalis, which followeth.

Sixe things not naturall
- In receiuing of the aire.
- In Meate and Drinke.
- In sleeping and waking.
- In mouing and rest.
- In fulnesse and emptinesse.
- And in affections of the minde.

This is also a speciall and a necessarie part to be knowen of the Chirurgion, for without this knowledge he cannot giue conuenient diet, neither yet conuenient order for the gouernment of the diseased and sicke Patient, nor yet at what time he shoulde sléepe, at what time he should eate and drinke, or what manner of meates and drinkes hée should haue, and whether they shoulde bée liquide in substaunce or grose and thicke, neither shall he knowe whether the same meate and drinke maye augment the disease or not, by meanes whereof, he may giue such diet to his patients, as may confirme their diseases. As for example, in Elephantiasis, and Cancers, which by eating of melancholike meates, or such meate and drinke as doth make adustion of the bloud which doth confirme them. There might be many more thinges saide of meate and drinke, which is not materiall to be spoken héere, for I thinke no man doubteth, but that this instrument doth chiefly appertaine vnto this Arte, for it is not possible for a Chirurgion to cure his grieued patient, except he giue conuenient diet, & with conuenient diet many greate grieuous wounds, and manie other cruell sicknesses, by the helpe of other conuenient medicines haue bene cured.

And as for the gouernment by the aire, euerie man that hath anie knowledge will confesse, ỳ colde sicknesses which are taken by cold, are to be cured in places where ỳ aire is warme, or else it ought to be made warme by art, according to the time of the yeare, for it is one of the principles and speciall rules which Galen comunaundeth vs to kéepe, that we shall cure euerie thing by his contrarie, as heate by colde, colde diseases by hot thinges, drinesse by moisture, and moisture with those thinges that bée drie, fulnesse by abstinence, and euacuation by emptinesse, by things of good nourish

nourishment to fill withall, watching, by thinges that moueth slæpe, & ouer much slæpe, by kæping of them waking. Thus euerie thing is ouercommed and holpen by his contrarie, by meanes whereof the Chirurgion doth more safelie and readilie restore to health, his grieued & wounded patient, without which thinges, and their right vse, could not be done. And therefore this part is called a most necessarie and principall thing appertaining to the Artist. There is another vtilitie in this part also, which the Chirurgion of necessitie must vse, for Galen saith, that euerie Artist that will rightlie cure, must intend two thinges. The first is to conserue and kæpe euerie thing that is in good state, by his like.

The second is to expell, and cure those things that bee contrary to nature, by their contraries, which we cannot do without these fiue things not naturall. Therefore it may be saide, Necessitas non legem habet, therefore there ought no lawe to bee made against that thing that must be of necessitie. As for example, of necessitie we must eate & drinke, that we may liue. Therefore it were tyrannicall to forbidde vs to eate and drinke, for they be proper things for vs whereby we doe liue. But yet the abusing of meate and drinke may be spoken against, and good and iust lawes made for the reformation thereof.

In like manner for abusing the arte of Phisicke or Chirurgerie, there hath beene good and wholesome lawes made heertofore, and I trust in our Lord God shall be hereafter againe. But to commaund from them the knowledge of their arte, or anie parte thereof, or other necessarie instruments or medicaments, wherewith they should cure their grieued and wounded Patients, which other wayes must of necessitie perish, or else not bee cured at all: Such commaundements or lawes were tyrannicall, and not to be well thought of, for that they should let the workes of mercie, in this most excellent arte of curing, to be ministred vnto the people orderlie for their safegard, & curing of their diseases.

There were much to be spoken of these fiue vnnaturall

things, which maketh nothing for my purpose here in this place, for that I intend nothing but to proue that these bee necessarie instruments, for the Arte of Chyrurgerie, by certaine examples, as you haue heard: for these things are spoken of at large, not onelie in many worthie bookes, which are set forth by Hyppocrates and Galen, but also in all other worthie mens bookes, that haue written of this art at large, as it may appeare at this present daie. Some men might here aske a question, why these are called not naturall things, for it is to be thought, that slepe, meate, and drinke, mouing, &c. should be naturall. But forasmuch as both health and sickenesse doth come by these things, therfore they be called not naturall. They bee not called against nature: for sickenesse, the cause of sickenesse, and the accidents that follow sickenesse, those be called Præter naturam, & against nature. Neither may they bee called naturall, for ỳ that sicknesses cõmeth by thẽ. But they are indifferẽtly called not natural. These things are so necessary for our bodies, as I haue said before, ỳ we do not onlie liue by them, but ỳ matter & substantiall of our bodies, after generation, is increased and mainteined by them, and also all the humours and temperaments with the spirits, and other things contained in the same bodie, should vtterlie cease if it were not but for those fiue thinges. Thus I conclude with these examples aforesaid, to proue this part to be necessarie for the art of Chirurgerie, doubting nothing, but those that be learned men and men of reason will so iudge, for so haue the auncient fathers before our daies, appointed it to be. Now that you may the better come to the perfect knowledge of these things, I thinke it good to declare vnto you some of the bookes which both Hyppocrates and Galen haue written. Hyppocrates de elementis, Hyppo. de Aqua Aere, & regionibus, Hyppo. de flatibus, Hyppo. de vrinarum differentijs, Hyppo. de ratione victus salubris, Hyppo. de ratione victus prauatorũ, Galen de sanitate tuenda, Galen de imperica, dieta sub figuratione, Galen de aqua, Gal. de pũssana, Galen de Euchimia, & Caccochimia, Galen de attenuante & crassante victu, with many more bookes, written by most excel-

excellent men, sence their times, which were superfluous, here to be reherſed, for as much as theſe are moſt neceſſary to be vnderſtode, and ſufficient for the proofe hereof: And thus I commit this part vnto your friendly iudgement, proceeding vnto the fourth part, called Semiotica.

Semiotica, is an other part, perteining to the arte of Chirurgerie, which part doth iudge by ſignes, and tokēs, what the diſeaſes are, and what be their natures, and what humors or other things be the cauſe therof, and whether they may be cured eaſely, and in ſhort time, or whether they be hard to be cured, & muſt be cured in longer time, or if they cannot be cured at all. Or elſe whether it is not neceſſarie, that it be not cured at all, leaſt worſe diſeaſes, ſhould come by the curation of them, and ſpecially, this part is neceſſarie, about the curatiō of wounds, to know which are deadly, and which are not deadly, and alſo which are maymed, and which are not maymed, and to foreſee, daungerous and perillous accidents, which might chaunce vnto the woūded man, as paraliſis, conuulſions, gangrena, ſpaſalus, and manie other more daungerous diſeaſes, which ỹ Chirurgiō ought not onely to foreſee, by meanes whereof he might reſiſt the ſame. But alſo, when any of the greuous accidēts, doe happen, he might make a good and a true prognoſticatiō, what might happen after theſe greuous, and perilous ſickneſſes, and alſo in wounds, that chaunceth in daungerous places, to prognoſticate, and declare the great perill thereof, vnto the ſicke and greeued pacient, or elſe vnto his friendes, as it ſhall be thought moſt conuenient: for except he make a true and a iuſt prognoſtication, he ſhall get vnto him ſelfe diſhoneſtie, and cauſe the worthie arte, to be euil ſpoken of. This parte of the Arte can not be attained vnto, without great knowledge, and long experience, and alſo a moſt excellent wit. For Hyppocrates, ſayth, in his Aphoriſmus, that this part, is the moſt hardeſt, he ſaith, that the lyfe of man is ſhort, the arte of medicine long, the occaſions to miniſter medicines many, proouing of experiments, perillous, but iudgement, and prognoſtication of ſickneſſe, to be moſt difficult and hard.

Wherefore Hippocrates and Galen, did will all men, that would auoyde slander, and euill name, to beware, & wise, in prognosticating, and not to be rashe and quicke. How many men haue gotten dishonestie, for lacke of knowledge of this parte of the Arte, and by mistaking of the Symptomata, and accidents, it were wonderfull, to number them. And also how many sick men haue bene ouerthrowen, and vndone, for lake of knowledge of the same parte, it is not to be spoken. Wherefore this part is most necessarie, and requireth most diligent and exacte studie, as it doth appeare, both by Galen, and Hippo. in Galen, where he hath written vi. bookes, de differentiis & causis morborum, & Symptomatum, which doth chiefely perteine to this parte of the Arte. And also that most excellēt and worthie man Hippocrates, hath written two diuine workes, wherein is conteined diuers bookes, the one called his Aphorismus, and ỹ other his prognostications, which are the most worthiest bookes that euer were written, for him that shall practise in this Arte, for therein may he learne the diuine iudgement of Hippo. And also how to prognosticate rightly, which two thinges, doe most chiefely and principally appertaine to the Art of Chirurgery. Thus I haue declared vnto you, ỹ foure principall parts, or as we may tearme them, the foure principal pillers, or foundaments of this art, without the knowledge of which foure, no man may rightly, or methodically worke, in the same arte. I dare not say, no man ought to worke in this Arte, that vnderstandeth not these, least I should condempne a great sort, but I will say, as Hippocrates, Galen, Guido, Valleriolus, Tagaltius, and many other worthy men doe say, that these are the principles of the Arte, and they ought first to be learned, and trained vp, in the knowledge of these, before they be permitted to worke in the Arte, for in the olde time, they did first learne their principles, and had them by heart, and then they were brought vp, vnder some cunning maister, where they might see the same put in practise, and so trained vp in most exact and perfect experiēce: And thus being brought vp, they were able to iudge in their art, & so they did cōstitute & builded vpō these foure

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ciples, a most excellent art, which Galen calleth Therapeuticon, that is to saie, the art of curing, which part, those that are disposed to reade their woorks may plainlie understand, and specially in a booke called Introductio, seu medicus. Thus I haue proued these foure parts, as I haue said before, to be the Theorike part of Chirurgerie, and we intend to proue Therapeuticon to be the practike part, for that it doth cure diseases & griefes of mans bodie. Guido, Tagaltius, & other, did not make these fiue diuisions of parts, as I haue done, but diuided the art into two parts, that is, into the Theorike, and Practike: for Guido saith, that he which woulde vse the arte of Chirurgerie, must be learned in the Theorike part, as wel as in the Practike part, but Guido vnderstandeth the Theorike part to be Phisicke, and the Practike part to be Chirurgerie, as it may appeare by his woords hereafter.

Conditiones quæ requiruntur in Chirurgo, sunt quatuor, prima est quod sit literatus, secunda, quod sit expertus, tertia, quod sit ingeniosus, quarta, quod sit morigeratus: Riquiritur quod sit Chirurgus literatus, non tantũ in principijs Chirurgiæ, & sed etiam Phisicæ tam in Theorica, quam in Practica. In Theorica, oportet quod ipse cognoscat res naturales, & non naturales, & contra naturam, precipuè Anathomiam, nam sine ipsa factum est nihil, in Chirurgia. The English is this. There be foure conditions speciallie required in a Chyrurgion: first, that he be learned: second, that he be expert: third, that he be ingenious, and fourth, that he be well mannered: It is further requisite, that the Chyrurgion be not onelie learned in the principles of Chirurgerie, but also in Phisick, as well in Theorike as in Practike: In Theorike, it behoueth him to knowe thinges naturall, not naturall, and things against nature.

Thus it maye manifestlie appeare by the woordes of Guido, that he vnderstode the Theorike part to be Phisick, and the Practike part to be Chirurgerie, for other diuisions made he none, but vsed the art indifferently together, that is to saie, diet, purging medicaments, and all other things appertaining to the art of Chirurgerie. These foure partes

that

that we haue spoken off before, were accounted to be Physicke, as Guido and all other later writers doe make mention, and euerie one of them supposeth, that a Chyrurgion ought to know these partes, either else he cannot rightlie and methodicallie worke in his arte: But when he doth vnderstand these parts, and is well brought vp in experience in the same, and hath also good vnderstanding & knowledge both in the simples and compounds, whereof he maketh his medicaments, and hath seene long experience, and vse of the same, I thinke him then a man meete and worthie to be allowed to vse the practike parte of Chirurgerie, or else not, for otherwise he should be ignorant in the curation of many grieuous diseases, which doth appertaine vnto this art, that cannot be cured other waies, but by the administration of the hand, for this parte called Chirurgia is the last remedie in the arte of medicine, and cureth those things which are most hard and difficult to be cured, and therefore it is accounted amongst the auncient writers, as both Galen and Hyppocrates doe affirme, to be most profitable and most worthie, as we shall declare more hereafter, in the Treatise of the methode of curing, called Therapeuticon. And thus wee end this fourth parte, called Semiotica.

Now it doth behoue vs to speake of the last part called Therapeutica, and although it be last in number, yet it is chiefe in effect, and most profitable in the common wealth. For Therapeu is no other thing to be vnderstoode, than Curatio, and Curatio is nothing else, but to helpe mans bodie of wounds, sickneese, and other infirmities, as I haue sayd before.

Therefore Guido doth saie, that this arte doth restore mans bodie vnto health by the curation of wounds, vlcers, tumours against nature, fractures, dislocations, and all other infirmities wherewith the same bodie is grieued. And he addeth and saith further, as much as lyeth in the Chirurgion to doe. For he saith, that it lieth not alwayes in the Artist to restore his sicke patient to health, for that that manie diseases be incurable, which the Artists ought to

to vnderstãd, and know, and to make true, and right prognostication thereof, least he should get vnto himselfe great shame, and bring infamy and slaunder to the noble arte. Therefore, one Vego, a Spaniard, who hath made a worthie commentarie vpon the prognostikes, of Hippo. sayth, that it doth behoue ỹ artist chiefely, to prognosticate rightly and truely, of those things, which are to come, which being knowen, neither could the daunger thereof be auoided if it were possible, neither yet should ỹ artist auoyd a slanderous & pernicious name. And therefore he deuideth this arte into three parts, that is, into agnostica, prognostica, and curatiua. Agnostica, he vnderstandeth to be, the knowledge of naturall things, of things not naturall, and of things against nature. Prognostica, he vnderstandeth to be, a right iudgement, in the foresaide thinges, which he doth gather by the Symptomata, of the bodie, & other excrements which nature doth auoyde. Curatiua, is that part which followeth both these and with knowledge and right iudgement, truely and rightly, prognosticating the same, he doth take vpon him, perfectly to cure mans bodie, of those grieses and diseases, wherewith it is hurt, either else, if the same may not be cured, to preserue the same, from further vncõuenience, as much as is possible for this arte to doe.

Thus it seemeth to mée, by ỹ words of this great learned man, as well as by the words of Guido. &c. That this part of the arte, called Therapeutica, or curatio, consisteth in two speciall points, (that is to say) in the curing of mans bodie perfectly, and in the preseruation of the same bodie, when the diseases are incurable, as in Cancers. &c. as wée haue saide before.

There be other learned men that deuide this Arte, but into two partes, that is to say, into Theorica, and Practica, Theorike, doth consist in the exact and perfect knowledge of these foure partes, which we haue spoken of before, that is to saye, in Phisiologia, Pathologia, Eugiena, and Simiotica. And the fiue parts named Therapeutica, doth consist in the right practising & vsing of cõuenient remedies, to cure mans bodie withall, by the helps, vnderstanding, and true knowledge

ledge of those things aboue specified, for as much as this part, doth bring to passe by an operation, and practise done with the hand, or ministred by the hand, therefore this part is called Practica, that is to say, practising and putting in vse all such necessarie things, as may apperteine, either for ỹ curatiõ, or preseruation of mans bodie. And for as much, as these two thinges are brought to passe and done, by certeine wayes and meanes, which reason hath inuented, and experience hath found true, and without these things, wée can not rightly cure, or bring to passe ỹ desired scope or ende of our Arte, which we doe intend. Therefore, it followeth of necessitie, that wée must nédes vse them, either else wée shall not vse the practike part, which is the onely ende, and function of our vocation and Arte. And these things be cõmonly termed instruments, which instruments are apointed of Almightie God, to helpe vp in the time of nède, for without these, wée can doe nothing in this Arte. The first is dyet, the second is medicaments, the third is our handes, to minister the same with all, and these are named generall instruments, and also speciall, for that, that all the auncient fathers, and most excellent men of this Arte, did alwayes so vse them.

Wherefore, I thinke there is no reasonable man, or any that is learned in this Arte, that will say the contrarie, except he will wilfully, and witlingly, condemne both reason and experience, and not onely experiẽce and reason, but also these two most worthie and famous men, Hippocrates, and Galen. This part or those that vse it, hath also founde out many notable medicaments, with their natures, and hidden properties, which otherwayes, by the Theorike part could neuer be found out, yet by long practise and experyence, the natures, qualities, and hidden properties, are foũd out, to no small helpe of the Arte of medicine, for by their natures and qualities, they are methodically vsed, and doe cure griefes, and diseases, as sicknesses, which be hot, are cured by cold thinges, those that be moyst by drye thinges, &c. But those which doe cure by hidden properties, are such, as no reason can be made vnto, as for example, To expell

venim, either in the pestilence, or in Morbo camilliontiaci, in lepra, or in biting of any venimous beast, these are rather cured, with medicaments, which doth it of propertie, rather then qualitie. Thus it doth behoue the artist, which will deale in this parte, called Therapeutica or practica, not onely to haue perfect knowledge, in all these thinges aforesaide, but also to haue a very exact knowledge of all such simples, as he will make his medicaments of, or as he doth intend to minister vnto mans bodie, any maner of way, not onely as is saide before, their natures, and temperaments, but also their qualities, and hidden properties: and also ỳ times, when they should be gathered, how they should be kept, and preserued, how long they will continue in ther vertue, and strength, and whether they be of more force and vertue when they be græne, or when they be drye. All these thinges doth apperteine vnto the Artist to know, and also, to what vse he ought to minister the same, and what commoditie may come thereby. These things, as I haue sayde vnto you before, are knowen two maner of wayes, that is to say, by reason, and experience, neither can they be knowen by any third way, as Galen saith in his third booke, named Therapeuticon.

Therefore it is requisit, ỳ this Artist be not onely learned, in the Theorike part, as we haue saide before, but also, to be learned and brought vp, vnder some cunning man, which hath good knowledge in ỳ same arte, or otherwaies, it is not possible, to come to the exact and perfect knowledge thereof, which is chiefely & principally required. If I should tell you, of the vngrations witchcraftes, and of the foolish and mischiuous abuses, & misuses, that haue bene in times past, and yet in our dayes continually vsed, ye would not a little marualle thereat. But for as much, as it hath not only turned to the dishonor of God, but also, the state of ỳ cõmon welth: I haue thought it good to declare vnto you, part of their wicked doings, that it may be vnto you which professeth this Arte, an example, to auoyde the like most wretched deeds. These things, I do not speak to you of hereSay, but of mine owne knowledge. In ỳ yere. 1562. I did see

in the two Hospitalls of London, called S. Thomas Hospitall, and saint Bartholomewes Hospitall, to the number of CCC. and odde poore people, ỹ were diseased of sore legges, sore armes, fete, and handes, with other parts of the bodie, so sore infected, that a hundreth and twentie of them could neuer be recouered, without losse of a legge, or an arme, a foote or a hand, fingers, or toes, or else their limmes crooked, so that, they were either maymed, or else vndone for euer. All these were brought to this mischiefe, by witches, by women, by counterfait iauills, that take vpon them to vse the Art, not onely robbing them of their money, but of their limmes, and perpetuall health. And I with certaine other, diligently examining these poore people, how they came by these grieuous hurtes, and who were their Chirurgiõs that loked vnto them, and they confessed, that they were either witches, which did promise by charmes, to make thẽ whole, or else some women which would make them whole with hearbes, and such like things, or else some vacabound iauil, which runneth from one countrie to an other, promising vnto them health, onely to deceaue them of their money. This fault and crime, of the vndoing of this people, were layed vnto the Chirurgions, I will not say, by part of those that were at that time maisters of the same Hospitalls, but it was saide, that Carpinters, women, weuers, coblers, and tinkers, did cure more people, then the Chirurgions. But what maner of cures they did, I haue told you before, such cures, as all ỹ world may wonder at: yea, I say such cures, as maketh the diuell in hell to daunce for ioye, to see the poore members of Jesus Christ, so miserably tormented. What shall I saie, here vnto, but lamẽt and pray vnto our Lord Jesus Christ, for his precious bloud sake, that he shed vpon the crosse, to illuminate the hearts of the magistrates, for amendement hereof. And that this rablement of runagates, with witches, baudes, and the diuells sothsaiers, with tinkers, coblers, and sow gelders, and all other their wicked coherents, of these same diuelish and wicked sectes, which doth thus abuse this noble arte of medicine, to the vtter defasing of the same, may be reformed and amẽded, and euery

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one to get their liuing with truth, in the same arts ỹ they haue ben brought vp & wel experiēced in, either els to be greuouslie punished, as they be in all other Countries, and as they haue bene here in this Countrie in times past. For seeing there is lawes made for him that stealeth a sheepe, an oxe, or an horse, which is but a beast and serueth to mans vse, and hee that loseth the same, loseth no more but the value of the vse thereof, why may it not be as well considered for the losse of an arme or a legge? yea, and many times of the life, which these wicked generation doe spoile, I thinke the Prince is bound in conscience, as wel to punish those false and wicked pernitious deceiuers, which doeth not onelie destroie the lims of man, but his life, as to punish these which steale sheep, oxen, or horses. Of this sort I think London to be as well stored, as the Countrie, I thinke there be not so few in London as three score women, that occupieth the arte of Phisicke and Chirurgerie. These women, some of them be called wise women, or holie and good women, some of them be called Witches, and vseth to call vpon certaine spirits, and some of them vseth plaine bauderie, and telleth Gentlewomen that cannot beare children how they may haue children. What manner of other sorts and sects there be of these, as some for sore breastes, some for the stone and Stranguric, some for paine of the teeth, some for scald heads, some for sore legges, some cunning in Mother Tomsons tubbe, and some to helpe maides when they haue lost their maidenhead, when their bellies are growen to great, to make thē small againe, with a thousand more. Galen in his booke of sects, did neuer make mention of the fourth part so manie, I thinke, if this worshipfull rablement were gathered together, they would make a greater profession than euer did ỹ Monks, the Friers, & the Nuns, when they did swarme most in London.

This vnprofitable companie haue so increased within the Citie of London, that all the Countries in England haue taken insample thereof, yea, and at this daie all the Countries in Christendome may wonder at our lawes in suffering and maintaining of them.

Well I say, wee will let all these passe, with tinkers, cobblers, louters, and sow gelders, and a great many of occupations more, whereof, some commeth out of Fraunce, some out of Germany, and so of other countries, some for religiō, & some for picking of purses. &c. All these now, are become great Phisitions, and Chirurgions, to no small aduancement of this noble Arte of Medicine, for their noble and worthie cures, doth beare witnesse thereof, and giueth so good report vnto them, that at this day, the learned Phisitions and Chirurgions, may not a little reioyce. Well, I say no more, but God amend all, and except these things be quickly amended, I thinke the diseased people, and such as haue vlcers, woundes, diseases, and sores, are like to haue small helpe, and if it shall chaunce, the prince to haue wars: then are this company that I haue spoken of, like to serue, and I doubt nothing, but that the souldiers shal haue great courage to fight, for so much, as they shal haue, such a goodly companie of Chirurgions, to cure them, when they be wounded. As for other Chirurgions, there will be but a fewe left, except better order be taken, and that with spæd. Well, now wee will proceede to our matter againe.

Now my welbeloued brethren, ye haue hard of this vngratious company, with their damnable deedes, which may be vnto you, an example, to incourage you, to flye ignoraunce, and to learne the exact, and methodicall way of curing, according to knowledge, & also to know these things, that doth appertaine vnto the same, not onely these v. parts, aboue rehearsed or three, or two, as it seemeth good to you, to deuide them, for it is not materiall, as Galen saith, so that you vnderstād the thing. Not onely these, I say, ought to be perfectly knowen, but also, all medicines, both simple, and compoūd, with their natures and properties, their operations, and right applicatiōs, and at what time the same ought to be ministred, to what partes of the bodie, and for what griefes and diseases: and also, according to right indications taken, what ought to be first ministred, what next, and so to the last.

All these thinges, as I haue saide, doe appertaine vnto the

the right and true Chirurgion, not onely to know, but also orderly to follow, or else he shall be accounted an empirike, and little better then one of these rude rablement, which I haue spoken of before. Wherefore, my welbeloued brethren, that vse this arte of Chirurgia, I exhort you in the name of Almightie God, that you your selues, be not onely diligent in learning of all these partes, and other thinges, necessarie, appertaining vnto your arte: by meanes whereof, not onely murther, and other greuous misfortunes, which might happen, through your ignorance, may be auoyded, but also perpetuall slander, with all other infamous report, and displeasure, may be likewise auoyded also. And that in like maner, your seruaunts, and children, which you doe intend to bring vp in this Arte, be learned, not onely to write and reade, but also in the tongues, that he may more exactly vnderstand these parts, as I haue said before. And so by this meanes, you shall not onely restore the Arte, againe vnto her good name, which is almost lost, at this present daye, through that foule and vgly monster, ignorannce, but also get vnto your selues, perpetual honor, and good fame.

And furthermore, by your excellēt knowledge, and vertuous liues, and cunning deedes, which followeth after, and are the fruites of knowledge, by these thinges, I saye, and with the helpe of the high and mightie Lord God, you shall abolish and put downe, these wicked and pernitious sectes, which are no lesse vnprofitable, vnto Gods people, in the common wealth of their countries, then caterpillers, and Grashoppers, are vnto the fruites, and herbes of the ground, which sectes, be not onely pernitious, as I haue said before, but perillous, and sclaunderous, vnto you, that be the true professers of the Arte, for they call themselues, by the name of Phisitions or Chirurgions: And the simple ignorannt people, doe so receue them, or thinke them to be, but in deede, they be such as Christ speketh of, wher he saith, ỹ they come in shēpes clothīg, & be rauenīg wolues, so these come wt̄ good names, & be craftie, and pernitious deceauers, which are to be driuen out of euery good common welth.

Thus (moſt gentle Reader) I haue troubled you with a long talke, deſiring you to beare with my ſimple and rude ſtile, wiſhing with all my heart, that it had bene better, and deſiring you moſt humblie where you finde anie fault, curteouſlie to amend the ſame, or elſe to giue me knowledge, and I ſhall be as willing to amend them, as I haue bene diligent in ſetting it forth, praying you to leaue off ſlaunderous wordes and euill iudgement: by meanes whereof I haue bene greatlie impaired, not onelie in my good name, but alſo in the profite and commoditie of my arte, which is to my great hinderaunce: and this hath partlie riſen by a booke of Chirurgerie which I haue latelie ſet forth, to my great coſt and charge, and ſome men haue not let to ſaie, that it was onelie Doctor Cuninghams dowing, and none of mine. Vnto whom I anſwere. That Cuningham was the writer thereof, and put the ſame booke in order, as you may now ſée, for I my ſelfe hauing not perfect vnderſtanding of the tongues, required him, for the more perfection thereof, to put in the Greeke & Latine words, in ſuch ſort as he thought good. And for the matter in the moſt part therein contained, you may verie well perceiue that it was mine owne practiſe, as the ſtories therin contained for the curation of diuerſe people, doth declare, which I my ſelf did cure, as it may more at large appeare in the ſame booke. And for the medicines ý be written in the ſame booke, their names which deuiſed the ſame medicines, are put vnto thē, ſo ý this is but a ſlaunderous, vntrue, & malitious reporte, onlie to deface me of my good name, without any deſeruing or cauſe reaſonable.

For it is well knowen, that Maiſter Cuningham neuer did anie ſuch cures, as there is mention made of, neither yet is Maiſter Cuningham anie Chyrurgion, as yée may perceiue farther in his own Epiſtle written vnto the ſame booke, wherein he doeth not onelie declare my paines and trauaile in collecting certaine partes of Chyrurgerie, but alſo my great expenſes and painfull labours in collecting and ſetting forth of the ſame.

Theſe ſlaunderous and euill wordes haue cauſed me to

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set pen to woke my selfe, to auoide that foule and euill fauoured monster, false detraction, and also to spare my expenses, which I before did lese amongest vnthankfull and ingrate persons. And I haue taken paines now mine owne selfe, without anie other helpe of liuing men, at this present daie, but of mine owne trauaile, and collected them out of these famous authors, which I haue before rehearsed vnto you, and although it be not in so good forme and eloquent stile, as it might haue bene, if a better learned man had taken it in hand, yet the truth is not to be reiected, because of the barbarousnesse of the stile, or words. Thus I leaue off least I should be tedious vnto you.

Now I will speake of the end of this noble art, or as you will saie, to what ende this art doeth serue. The end of this art of Medicine is, to restore mans bodie to health, as much as lieth in this Artist to do, so that the end of this art consisteth in the curation of diseases, or as we may tearme it, restoring of health. For man at his birth was cast into this world naked, and vncouered, requiring the helpe of other things to couer his nakednesse withall, neuer leauing crying and weping, till such time as reason and nature had prouided for him such necessarie thinges as dyd growe vpon the earth, either else vpon some other creatures, by meanes whereof, hee was both nourished and also clothed, and also by the vertue of other thinges that the Earth brought forth, restored to health in the time of his grieuous infirmities.

But how was he restored to health? Truelie by Arte. And by what Arte, euen by the art of Medicine, which doth comprehend both Phisick and Chirurgerie, with the knowledge of all simple Medicines, and compound medicaments, and all other things whatsoeuer doe appertaine vnto the same. And therfore I will saie, as that worthie man Hippocrates did. That this art is most honourable and worthy, for that it doth intend to kepe mans bodie in health, and to remoue sickenesse. Therefore it is said, that the end of Chirurgia, is the restoring of mans health.

Now let vs consider whether this art be like vnto other

artes, or not. In some thinges wee saie, it is like vnto other arts, and in some things it is not. It is like vnto other arts, in that it doth consist in a multitude of principles, whose affectes are rightlie to bring to passe or finish some thing which we intend to doe, for Aristotle in his. 6. Ethic. cap. 4. doth define Art to be a certaine order of doing, placed with habit and vnderstanding, working vppon some subiect, to bring to passe and finish some thing that he doth intend, by ỹ same art, so that what thing so euer is brought to passe or done, it must nedes be done by some one art. In this the art of medicine is like vnto all other artes, for that it consisteth in doing and bringing to passe, or as we may tearme it, in restoring health, or curing mans bodie, being subiect therevnto. But other waies it doth differ, and doth require a further knowledge than the common Artist doth. It is requisite that this Artist which intendeth to vse the arte of Medicine, should be verie well learned in the speculatiue part of his arte, as well as in practise. It is vnpossible to carrie in minde so many considerations, so many obseruations, and so many inuentions as this art doth require, and therefore it is requisite, that he be not onelie well learned in the principles of his arte, but also that he be studious in the workes of other excellent men, wherein he may learne their wittie and ingenious deuises, to helpe this Artist the sooner to bring to passe his desired end. In this it doth much differ from other artes, which worketh onlie by experience, in wittie bringing of things to passe, without anie further consideration, neither doe they need anie such excellent learning, for that theirs doth consist chieflie vppon experience and practise, and hath not so much regard vnto the life and health of man. For this art doth onelie intend to saue mans life in the time of necessitie, & also to remoue awaie such grieuous sicknesses as might anoie and disquiet both bodie and minde. Wherefore this Artist is chieflie to be considered and loked vnto, not onelie to be rewarded for his excellent cunning in restoring mannes bodie to health, but to bee seene vnto and throughlie examined, whether he bee learned in this arte or not, if he be not learned, neither vn-

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derstandeth the principles of this arte, then he is to be forbidden this art for the worthinesse thereof, for this worthy art worketh vpon mans bodie, for whome all this worlde was made, and all things therin contained, and the almightie Lord had so great care for man, that he did not onelie make these things for him, but also made him Lord of thē, and gaue vnto him straight lawes, that he shoulde forbeare, that one man should not kill and destroie another, neither wilfullie, neither yet willinglie.

Then I must conclude, that whosoeuer doth take vpon him to minister in this art, for the safegard of mannes life, and being ignorant in the principles thereof, as I haue said before, he taking vppon him, and the man perishing in his handes through his default, I saie, this is murther, and this is not the right end that art requireth, neither is it sufferable in the common wealth. And therefore it was not in vaine that this worthie man Guido did saie, that a Chyrurgion ought to be learned, not onelie in the principles of Chyrurgerie, but also in the principles of Phisicke, yea, and also in thinges both naturall and not naturall, and things against nature, without the knowledge of which, he should neither rightlie worke, neither yet bring to a good end, the desired scope which is required of the Artist. Thus you may perceiue, for this first propertie which Guido speaketh of, where he requireth that a Chirurgion shoulde bee learned, it is euen so necessarie for him, as the head is for the bodie, cut off the head, and see what the bodie can doe, although the bodie hath handes and feete, and other necessarie members, yet because it lacketh knowledge and the vse of reason, which was contained in the head, and should haue bene distributed to the rest of the bodie, to moue the same, and caused it to haue done the actions of the minde, throughout default hereof nothing might bee done: Euen in lyke manner, the Chyrurgion lacking knowledge of the principles of this Arte, canne doe nothing rightlie nor profitablie, but hee shall alwayes bee in daunger, eyther to kill or else to mayme some man, for that he lacketh that reasonable and methodicall knowledge which

this art doth require, being the head and principle thereof. It is not vnknowen vnto you what manner of seruice the Chyrurgion doth serue in, & in what places, at what times, and how necessarie it is in the common wealth: And although other men haue written verie well hereof, and that I doe not doubt, but that you haue verie wel considered the same: yet forasmuch as this most excellent seruice is not to be neglected, or a light account to be made thereof: I haue thought it good, for ỹ it pertaineth to my matter, some thing to giue you warning therin. I haue declared vnto you in ỹ beginning of this proime, the noblenesse of this Art, & how it is to be honored amongst men, for that it proceeded from the almightie Lord God, and was vsed and set forth by most noble and worthie Princes, and many other worthie men of most excellent vertue and learning. And now at this day either through negligence of the vncarefull Magistrates, or else through our euill natures, it is vsed by a sort of vnlearned persons, to the great ouerthrow & dishonor of this worthie Arte, yea, and almost to the vtter losse of the methodicall and true knowledge therein: which may bee no small daunger hereafter, except spedie remedie be had herein, and that noble persons be carefull for this so necessarie an Art, which kings in times past did not onelie giue great rewards vnto those learned men which set it forth, but also they themselues did vse it, by meanes whereof, they got vnto themselues immortall fame, in that they did deliuer their people by vsing of this art, from so many grieuous diseases, which dailie they were brought to death withall. Thus these gratious and mercifull Princes, were not vncarefull for their subiectes, and they did not onelie build certaine Schooles, that this Arte might bee taught in, but also they did deuise medicines, and ministred the same vnto those that had nede, in such good order, and with such knowledge, that manye thousands were restored to their health thereby, and by their examples they encouraged manie other noble persons, and also excellent learned men, and men of excellent wit, to studie and practise the same, to the great comfort of their common

wealth,

welth, and rewarded them with great rewards. But now alas, in this vnhappie time of ours, this Art is not onely neglected, and vnprouided for, but also despised, abhorred, & euill spoken of, by meanes whereof noble persons, and men of great learning, doth rather hate it, then seeke meanes or other wayes, to reuiue it againe. For I saye once againe, in this our vnhappy time: that Taylours, Shoemakers, Cookes, and Carpinters, are had in more estimation, then these noble Artists bee.

Yea, I thinke, Juglers, Players, yea, & Jacke sole with his soles coate, shalbe as well esteemed & placed in as neere romes vnto the magistrates, as these most excellēt artistes shalbe.

Well, I will say no more, but if that noble man Galen, were aliue, who doth say in his first booke de methodo medendi, that drunkards and riotous persons, were more regarded, thē men of knowledge and learning, and also how that Cookes, Carpenters, Smithes, and many other occupations did runne from their Artes, and tooke vpon them the arte of medicine, I thinke if he were now liuing, and in our Countrey, he would not a little meruaille, to see what a disordred company there is now at this day, which vseth this Arte: vseth this Art, nay, abuseth this Arte, most wickedly and vngodly, to the great dishonor of our countrey, & to the destruction and infamy of this worthie Arte. What shall I say, that these people be suffered, nay, rather maintained, in this vnhappie mischiefe. For I haue knowen, not onely noble persons to maintaine them, who haue written their letters in their defence, to keepe them from punishment, when they haue committed most wicked deedes, but also caused a lawe to be made, that euery one might occupy this Arte, without any punishment, not onely Shoemakers, and Tailers, Carpinters, and Tinkers, and such other as Galen doth vtterly condempne, and speake against: but also witches, and baudes, coniurers, and a sort of false sothsayers. I will not speake of a multitude of strangers, as pouch makers, and pedlers, with glasse makers, and coblers, which runne out of their owne countries, and here become

noble Phisitions and Chirurgions, such as now is most in estimation, and ruleth all the reast in our Countrie, so that the poor English men, and such as haue serued in the time of warres, with expenses of their goods, and losse of their liues, yea, and the rest of them that be liuing, must of necessitie serue at all times both by land and by sea, as well in the time of warres as in the time of pestilence: These poore men I saie, are constrained to serue, to their vtter vndoing, and when they come home againe, they, their wiues, and their children, may goe picke muscles, for this lolle companie afore spoken off, haue taken vp all their acquaintance whilest they be seruing in the warres.

Come to anie of these straungers, or anie of these other people, when the Prince should be serued, and one will say, I am a Tailour, another will saie, I am a Shoemaker, and the other will saie, I am a woman, so that then they will make delaies, by meanes whereof they will not serue. And thus the Prince and the common wealth in the time of necessitie, is vtterlie vnserued, for this Companie is content to take the liuing of Chirurgions, and the names to, so long as there is no need of seruice for the Prince, but then they haue new names, and if they be straungers, they will then trudge home againe into their owne Countries, or els hide thē out of the waie, or else retaine to some noble man, by meanes whereof, they will be defended from seruice of the Prince. And thus with this manner of disordered shifts, the Princes with their people, are not onelie euill serued, and somtimes not serued at all, but the noble arte of Chyrurgerie is vtterlie ouerthrowen and brought to ruine, and the true professors therof at this daie, be so few in number, that it is to be wondered at. I haue my selfe in the time of king Henrie the eight, helpe to furnish out of London in one yeare, which serued by sea and by land, three score and twelue Chirurgions, which were good worke men, and wel able to serue, and all English men. At this present daie there are not foure and thirtie of all the whole companie of English men, & yet the most part of them be in noble mens seruice, so that if we should haue nede, I dee not knowe

where

where to finde twelue sufficient men. What do I saie sufficient men? May, I would there were ten amongst all the companie, worthie to be called Chirurgions, and let the rest doe such seruice as they may, for if there be neede of seruice, I thinke their Chirurgerie shall appeare to some mannes griefe and paine. Thus I leaue off, and goe to my matter againe. My brethren, you that be English men, & professe this noble art, remember I saie, your vocation, and be not discouraged, for that that this rablement doth flourish, & that strangers are had in such estimation, which I know is vnto you no small discouraging, but I doe not doubt in time, God shall stirre vp the heart of the Prince, with her Graces noble Magistrates, to consider the great perill that may grow thereof, not onelie in the vtter losse of so worthie an art, which of necessitie must needs be lost amongest vs that be English men, except prouision may bee made, that these worthie Artilles may haue sufficient liuing to maintaine them withall, but also to forese that this common wealth may be serued with our naturall, true, and liege Countrie men, and not to preferre Straungers, which commeth rather hether for their owne gaine, than for anie good loue that they doe beare vnto vs, and in the time of greatest neede doth forsake vs. Therefore I praie you remember, that ye be verie studious in this arte, and diligent and neate in the practising thereof, and also to be modest, wise, and of good manners and behauiour, and that you lacke none of these good properties that we haue spoken of before, least when you shall be called for in the time of necessitie, to serue Princes, and other noble persons, ye doe not onelie dishonour your selues and your Countrie, but this worthie art also. Remember I praie you what great charge is committed vnto you in the time of warres, ye haue not onelie the charge of mens limmes, but also of their liues, which if they should perish through your defaulte, eyther in neglecting of anie thing that were necessarie for their health, which you ought to bee furnished withall, either else through lack of knowledge which ye ought to haue in your art: I saie, if these defaults be in you, and the people perish

in

in your handes, you cannot excuse your selues of your bro-thers death. Therefore as you would this art should pro-per, remoue from it such pernitious occasions as might be hurtfull therevnto. For if we shall be bloudie murtherers, or greedie and couetous catchers, and oppressers of poore peo-ple, let vs not looke for the fauour of God, neither yet to prosper in our art, or if we shall be negligent in prouiding of such necessary things as may be for the help of our disea-sed patients: either else if we shall lack knowledge for the right vse and administration of the same, we shall then be slaunderous vnto this most excellent Arte, and vnworthie professors thereof, and in verie deede, accounted no better than these rude runagates and butcherlie Dogleechers are.

Remember also the continuance of your art, as our fore fathers haue done before our time, which hath left no small number of worthie bookes for vs to peruse, whose diligence thereby, for the continuance of this arte, doth most mani-festlie appeare. And like as they haue with most diligent studie, diuine knowledge, & most willing hearts, left these their workes and labours vnto vs their posteritie, to be as it were guides, and most sure doctrine to follow: so I wold wish that we with carefull studie and louing heartes, fol-low their precepts, as louing children ought to followe the profitable commaundementes of their carefull Fathers. And al you that be young men, I request you also, that you be diligent in seeing of other excellent mens workes, & not to be too bolde & presume to deale with things aboue your knowledge, but in doubtfull & dangerous matters, to desire counsaile of the graue and auncient men, who hath more knowledge by long experience, & able to giue better iudge-ment than you are, by meanes whereof the Patient shall not onelie be the better prouided for, but you also discharged of great blame, which might happen, if anie thing came to the sicke patient: But well, let your honest manners bee equall vnto your excellent knowledge and practise in this worthie arte, see that ye be faithfull, trustie, and true, vnto your sicke patients honest of behauiour, sober of life, & com-

forthable of words. And also see that ye serue God, and loue him, and praie vnto him at all times, that the holie Ghost may assist and strengthen you in all your workes and enterprises which you doe take in hand, so that they may all turne to the commoditie of the sicke patient, and to the glorie of God, promising no health vnto them, but thy faithfull and painful diligence, for health lieth not in thy hands to giue, but in the might and power of the almightie Lord God, vnto whom be all honour, praise, and glorie, worlde without end, Amen.

Thus most louing Reader, I beseech thée to spare mée thy good word, for my painful trauaile which I haue taken herein, for the common weath sake, and for the furtherance of those that be young men of my Companie, and thinke not that I haue done it to teach anie learned man, but rather to encourage those that be better learned, to bestowe their diligence and trauaile, either for the amendement of this, or else for the setting forth of some better worke.

Thus taking my leaue, I beseech the eternall
God to prosper this most worthie arte,
and all the true and right profes-
sors of the same.

FINIS.

Thomas Gale vnto the friendlie Reader, Salutations.

MY friendlie and welbeloued brethren, when I did consider with my selfe the great defect and imbecilitie which doth remain amongst our Companie, for lacke of learning in the speculatiue part, of this worthie art of Chirurgerie, which chieflie doth appertaine vnto the same. And considering with my selfe what great ignorance and infamie hath growen to our Companie thereby, I haue not bene a little carefull to remoue the same thinges from vs. And considering with my selfe also, that these things cannot be remoued but by knowledge, and that knowledge cannot come, but by reading and hearing, and reading is vnprofitable, except it be vnderstood. Therefore I haue with great diligence collected and gathered together these foure bookes of Galen, called Therapeuticon, & being trãslated into the English tongue, I haue dedicated the same vnto you, to that end, that you may with the like diligẽce & studie, receiue pleasure, profit, & great commoditie, by these bookes which I heere deliuer vnto you with painfull trauaile, great cares, & charges: But when I did consider these diuine & most excellent bookes, how profitable & cõmodious the same should be vnto you, I saie, not onelie to you, but to the whole common wealth of our Countrie, & what great honor shuld grow vnto mine owne natural Country men hereby, & also what furtherance & increase of knowledge it shal be vnto those that professe this art. I neither regarded monie nor profit, nor passed for anie paines, but yeelded my carefull studie to serue your turne, in this most diuine worke. And moreouer, I thought it my bounden dutie, to helpe to raise vp that most famous mã Galen, who hath lien so long buried with that foule monster Obliuion, from the knowledge of our natural tongue, so that worthelie he hath deserued immortall fame. Now my brethren, there are three speciall points that are to be considered.

The

The first is, to whom you do minister, and to what end your ministration serueth. The second is, with what thinges you doe minister, and what methode you ought to keepe in the time of your ministration. The third is, what manner of knowledge ye ought to haue that will cure methodicallie and rightlie, by his ministration. To whom this Artist doth minister, it is easilie knowen, for he doth minister to mans body, which is subiect vnto the art of Medicine, and the end and affect of his ministration, is to cure mans bodie of such hurts and diseases, as the same bodie is anoyed and troubled with. The second doth consist in those things that you cure withall, and they be three, that is to saie, conuenient diet, or as wee may tearme it, conuenient gouernment of the sicke patient, and conuenient medicaments, apt and meete for the disease, and also an apt and conuenient person methodicallie & rightlie to vse these two. The third is, what manner of knowledge this person ought to haue. Galen doth verie well describe his knowledge in these bookes, against that foolish bragging Thesalus, how he would take vpon him in sixe moneths, to make a man perfect in this arte, and yet he himselfe but a Woolman, or as we may tearme him, a Spinner and carder of wooll, whose foolish stupiditie was such, that he would compare with Hyppocrates and Galen, and therfore Galen hath written against him in all these bookes, not onelie condemning him, but condemning all other ignorant persons, which vnderstand not the principles of this arte, and speciallie other Artists, as Carpenters, Smiths, Cookes, Weauers, and women, which doth leaue their owne honest occupations, wherein they haue bene brought vp, and dooth arrogantlie and presumptuouslie take vpon them this most worthie arte, wherein they be vtterlie ignorant, and if they cure anie thing, it is by chaunce, and not by methode, as you may perceiue in his first booke.

There is also another thing to be noted, that Galen doth not make such diuisions betwixt wounds and vlcers, as wee commonlie doe, for hee dooth name all those that commeth with solution, or separation of the skinne, Elkos in Greeke, that is to saie, an vlcer.

But

But if you doe diligentlie consider Galens method, as in the curation you shall finde it most excellent, and which is to bee vnderstoode an vlcer, and which a wound, &c.

Now there resteth no more but your painfull trauaile and studie heerein, and euerie one of you brotherlie and friendlie, to haue conference herein one with another, by meanes whereof the true meaning shal be the better vnderstood, & you your selues shal receiue it the better into your perpetual memory.

Thus I take my leaue of you, requiring of you no rewards, but true and faithfull good will, & louing words, with friendlie furtherance, desiring the almightie Lord to preserue and keepe you, and send you the knowledge in this worthie Arte, to the profit of the common wealth.

FINIS.

and hollownesse which springeth of the lost substance of the part, in which kinde it cannot often chance, that thou shalt fulfill both the scopes aforesaid, as if not onlie the flesh, but also the bone vnder it is perished, for such hollownesse cannot exactlie be filled, but you may bring it to a cicatrise, but this is the cure of the vlcer, and the hollownesse remaineth notwithstanding vncurable: Therfore this thing it behoueth to know, either by experience, or else by reasons help. But Thessalus vseth not these, neither putteth he to a third, & yet is not he ashamed to trifle, but let ỹ passe, & rather let ỹ Phisition who followeth Thessalus, teach vs how to cure a hollow vlcer in the fleshie part, nothing being hurt vnder ỹ vlcer, he answereth, by applying medicines which do engender flesh, they call them Sarcoticall. Well said, a greate facilitie, peraduenture you may better tearme it, stupiditie, when he thinketh sufficientlie to haue answered the question, by naming a sarcoticall medicine: for if we know this Sarcoticall, what doe we further require, shew vs I praie thee what Sarcoticall is, that thou wilt vse: I suppose that thou wilt answere, Olibanum, or Iris, or Aristolochia, or Eruifarina or Panax, for I will first make mention of vnie medicines: now go to. By what meanes hast thou found these medicines? thou answerest by Experience, what is it then that thou hast added hereto? for euerie person doth know, that that which is holow, must be filled, but experience hath taught of what things, and by what medicines that should be done: trulie Thessalus knoweth not that medicine, neither as an emperike, neither as a logitian: as an emperike because he will not: as a Logitian, because he cannot: for I trulie doe vnderstand, that he knoweth this medicine as an Emperike, for seeing there are two instruments of euerie inuention, that is to saie, Experience & Reason, he which doth know that is inuented, and yet can giue no reason thereof, doth shew himselfe to haue found it by experience, therfore ỹ he may vnderstand how greatlie he hath erred, let him a little giue audience vnto vs, for I will haue to doe in fewe woordes, with the professour of onelie Experience, for it is méete that he also do vtter by what meanes

he hath found out this drying medicine that doth incarnate, which hée nameth Cephalicin, and that is compound of Iris, and Aristolochia, and Ervus, & Olibanum, and Manna, that is to saie, the drosse of Olibanum. There is also another medicine, which besides these that are rehearsed, hath the rinde of Panax, and another medicine to, which is mixed with washed Cadmia.

Now let him tell me how these medicines be found, but what skilleth it (saith he) to aske of ỳ finding of thē out, is it not better to vse those things that are found out right? And this at the first they answered, afterward they saie, that these medicines be found out by dreames, in the meane time by chaunce one medicine was put to another, afterward one was bolde to vse them mixed, but yet they shewe not the successe of their boldnesse. Therefore these be manifest trifles. The third waie of invention, trulie is reason, or some proving everie one of those simple medicines separatlie, to be Sarcoticall, afterward beholding ỳ sometime it doth not make flesh, he findeth out by reason, that everie one of those agréeth not to everie nature, for vnto whome Aristolochia doth not fill the vlcer with flesh, there Olibanum hath, and where Olibanum hath not profited, there Iris hath done good, for I suppose that to be reasonable, that all men are not affected to all things alike. And when this came first into reasoning, it was thought good that many medicines of one kinde should be mixed together, that there might not want a méete medicine for everie nature. And friend, the action of everie substaunce doth not remaine in mixed kindes, so that in everie kinde of bodie, there might be present that should helpe the disease, for if they coulde finde out the nature of the bodie, or the force of the Medicine applyed, peradventure there should not nēde such varietie in them, in as much as they shoulde alwaie readilie finde that one medicine that should agrée to one bodie.

Now for as much as they are ignorant in both, they doe crookedlie mixe all together, studying to make one medicine that might agrée to all natures, and I suppose this reason of compounding medicines to be found out of the first Phi-

sition

stions, and you receiue it as an auncient inuention, notwithstanding I suppose that it is not so farre from the true medicinall method, as it is reasonable to be emptied into another, for if they doe not first thinke of that method, whose composition standeth in medicines like of kinde, and not of that which is of contrarie, by and by you shall finde in the mixture of these medicines, some one that may be profitable to the sicke, and peraduenture not one: contrariwise, seauen or eight which shall not need, so that the medicines shal more hurt that profit.

These thinges I saie, if he doeth not remember, I will account him more ignorant than to knowe the thing it selfe, for oyle being put into a hollowe wound, is most contrarie of all other medicines, for if thou wilt that waie cure, thou shalt by vse finde the vlcer to be filthy and stinking, but if the time also of the yeere be hotter, or y man hath Cachochimia, or by nature is apt vnto runes, or offend in his diet, it is to be feared least y part do putrifie, in which the vlcer is made. In like sort, if thou doest vse ware either alone, either dissolued in oyle, for they truly do make the vlcer putrifie: but if thou doe put in Aerugo beaten fine, they shall by no meanes putrifie, yet it bringeth great paine and corrosion.

Further more, it doth eate and prouoke inflammation, and if thou vse it more largelie, it will also make consumption, therefore seeing that neither oyle, nor Aerugo, nor ware, can fill an hollow vlcer with flesh, it is manifest that none of those which professeth onelie Experience, will mixe them together, yet I truelie will mixe them, yea, in due waight, not onelie these, but a thousand other medicines, which bee not hurtfull to a hollow vlcer, for if they hurt not with the same faculties, but as it were with their contraries, truelie they are vnlike and immoderate to fill an hollowe vlcer: notwithstanding like as of two immoderate temperatures, there shall bee one made temperate, that wee haue set out in the waie of compounding medicines: therefore it is not hard to make a medicine of oyle, ware, and Aerugo, that shall make flesh, for if thou doest know that the same vlcer

is moderatlie to be dried, and doeth not vnderstand the waie or wyle doth not drie, neither that anie of them, or both mixt togither, can fill a hollow vlcer, nor that Aerugo alone can moderatlie drie: therefore if thou doest mixe all these together, thou maist make a medicine which shall moderatlie drie, what the quantitie or proportion of euerie one of them should be, that I haue now set out in my bookes, which be entitaled, the composition of medicines, and nowe also if it be needfull, it shall be declared in talke hereafter.

But first we must driue from these our bookes following, this Thessalus, but first declaring vnto him, howe much hee hath erred frõ a truth, for vnto anie that is wise, that which is now spoken, doth sufficientlie shew what the methode of curing ought to be, but with these we need not talke. Therefore it is necessarie that we dispute yet with those, taking here our beginning.

Euerie hollownesse that is against nature, doth require to be filled, wherefore also that which commeth in the fleshy part, and that filling in the end, of finding out remedies, which we desire. And that thou maist finde those remedies, which doe fill, thou hast nede of much reason and manifold indication, and exact, reasonable, and particular method, for thou hast often seene vlcers harde to cure, not to be cured, neither of those which professe experience, I meane those which abound in remedies, neither of those, which claiming reason to themselues, for these Thessalians, whõ they name, Methodicians, being indede most farre from a methode, as the Asse to the Harp, be vnmete to heare this speculation, much lesse cure, they find out by reason, that which is right. Thou hast seene many times in the like vlcers, the Empirikes to goe from one medicine to another, when truelie no reason did shewe them the waie, because they haue tried manye thinges which may fill a hollowe vlcer, the same as they call it, Idiosyncrasian, that is, properties of bodies, in which euerie of them are seene to haue force, neyther can they discerne, neyther yet remember. Therefore now also, not knowing whether to goe, but trusting in the proofe of many particulars, whatsoeuer they finde by the

waie

waie ȳ may profit, they goe from one to another, following Fortune rather than Reason, which may help in the inuention of remedies, like vnto these, although they will not be these Dogmatists, which are not able by reason to vnderstand the naturall principles of bodies, but of these Thessalions voide of method, what doest thou yet speake? Therefore those which cure by right method, doe finde apt remedies for euerie kinde of vlcers, as also conuenient diet, they do most apparantlie declare by the things it self, how much it profiteth, and how great light it doth bring to the arte of curing, the Treatise of nature it selfe declareth: for I haue not once declared vnto you, how that sometime they which goe from one medicine to another, doe let slip and neglect that which is profitable, and that with some one of their remedies, which they haue vsed, the same vlcers haue bene cured, therefore they haue worthilie despised the facultie of such remedies, which because of the vntimelie vse, they haue seene, not onelie the profite, but much for to hurt, and that in the first vse it hath done no euident thing. Furthermore, thou hast seene no lesse the grieuous pains of the eies to be healed, either with bath, either with drinking of wine, either with foments, either with letting of bloud, eyther with purging, vnto which these common sort of Phisitions haue applied no other thing, than these medicines which are made of Opium, and Mandrake, and Henbane, bringing great daunger vnto the eies, inasmuch as they taking no other thing awaie for ȳ present but the paines it selfe: these doe kill the sence, as thou hast knowen many, by the vse of these medicines, when they haue bene too much applied, neuer after to haue come to their naturall state, and that first their eyes were dim, and they haue hardly seene, after to be vered with suffusion (which is called Hipochysis) or with too greate dilatation of the ball of the Eie, named Mydriasis, or with Tabes or Corrugation, called Rhetinon.

Thou hast knowen also, being with me from sixteene yeeres of age, neuer to haue seene vnder anie maister this worke, but to haue excogitated it by reason, and how long

time I did consider that Aphorisme, of vnlayde bathe, or bath, or foment, or letting bloud, or purging, taketh away the paines of the eyes. And what truste I had by the rest of Hippocrates labozers, that there was nothing in this Aphorisme, either false or might not be brought to passe, & that was it which stirred mée to search, vntill (going Hippocrates way) I found by what meanes I should discerne, when and how, euery of the forenamed shuld be vsed. By which reason I made manifest to many, which haue séene the like things, of how great force the medicinall methode is, and how great occasion of euill they are, which haue not obserued the olde arte of Phisicke, haue builded new sectes, and now truely, although from the beginning I haue refused it, yet by entreating, you haue compelled mée to take al this whole worke in hand, which I pray the gods may be profitable, by others truely I haue small hope, al well for the contempt of good letters, which now do raigne, as also for the admiration of riches, estimation and ciuill power, vnto which whosoeuer doe turne himselfe, is not able to finde the truth in any thing: But these things shall be determined as pleaseth the gods, and we now for our power, shal restore the Methode of curing, which was found of the auncient Phisitians, being now neglected: repeting againe the disputation which we haue begunne of the hollow vlcer, and of the first inuention of those things, which doth fill an vlcer with flesh, let that suffise, which hitherto we haue saide, and let vs graunt if they will, vnto the Empericks all that they say. And for the vse of things foūd out, I haue often shewed to thée in themselues, and now nothing lesse, I will go about to demonstrate by reason, how these Empericks, cannot by certaine reason, go vnto another medicine, whē they haue nothing profited with the first, and that rightly chaunceth: for when as they know not the cause, of the vnhappie successe of the first medicine, neither can declare the lyke in the second, and when they are ignorant of the cause, wherefore the first medicine doth not his affect, neither are able to vnderstād, why it taketh no place, this thing truely being not knowen, they cannot reasonably go

to

to another, when as they cannot in the same medicine perceiue the like cause.

The third Chapter.

NOw therefore let vs set out Hyppocrates waie, and the true method of curing an hollow vlcer, surelie it behoueth to begin thus, that is, of the substance of the thing, therefore seeing that an hollow vlcer that is our scope, that ỹ flesh which is lost may be restored, it is needfull to knowe that the thing which engendereth flesh, is good bloud, nature as I may tearme it, being the workman and author, notwithstanding it is not sufficient to name simplie Nature, vnlesse we consider also whose nature, and where. For it is manifest, that Nature it selfe is the ingenderer of flesh, of those bodies that be subiect, whereas flesh is to be made, and surelie it is declared, that the nature of euerie bodie doeth consist of the temperament of hot, cold, moist, and drie: therefore it is manifest, that the iust temperament of these, in those parts whereas we shall restore the lost flesh, is as it were the workman. And first of all, in euerie hollow vlcer, these two things are to be considered, whether the bodie being subiect, be in iust temperature, that is to saie, whether it be according to nature. For we haue declared, that health of similer bodies, is the iust temperature of the foure qualities, and whether the bloud that floweth to ỹ part be good, or else but indifferent, for if either of these doe offend, there are trulie many affects against nature, notwithstanding there is now put to vs but onlie the hollownesse in the fleshie parts. Therefore let vs imagine the part to be sound, and the bloud which floweth to the parte, to be frée from fault, either in qualitie or quantitie, surelie these thinges beeing, as is sayde, there is no impediment, but that flesh shall prosperouslie growe, and that without the helpe of anie outwarde medicine, for both causes which ingender flesh, beeing present, and nothing outwardlie hindering, then it cannot bee, but that flesh must bee ingendered.

But

But in the first engendering of flesh, there must of force spring a double excrement, as we haue shewed in our commentaries of Nature, that there followeth euerie mutation of the qualitie of the nourishment, an excrement grose and thicke, and another thin. And these excrementes chaunsing euer through the whole bodie, that which is thinner, is inuisible, by perspiration, notwithstanding it is forthwith visible, as often as the naturall heate diminisheth, or that hée vseth more large diet than is méete, or that there happeneth to the creature more vehement motion. The other excrement is the filth, that is sent to the skin. Furthermore, in vlcers, the thinner excrement is called Sanes, in Gréeke Ichor, the groser is named Sordes, and the vlcer is made moist by the thinner excrement, in like sort as by the groser it is made filthie, and for that cause it néedeth two kind of medicines, that is to saie, exicatiues, to expell or drie ỹ which is moist, and mundificatiues, to purge the filth.

Now then, séeing that nature ceaseth no time, truelie there can be no time found, in which both these excrements may not be gathered together in an hollow vlcer: Wherefore there shall be no time in which thou shalt not vse both kindes of medicines, that is to saie, which shall exicate and mundifie.

And now we haue found out of what kinde the medicine ought to be, but that is not sufficient, for it is néedfull to inuent some perticular, which is to be applied to the vlcer. Now by what method, and howe shall they be found out? forsooth by the same which is set out in our bookes, of the faculties of simple medicamentes, for we haue shewed in them certaine medicines desiccatiue, certaine humectiue, certaine refrigeratiue, and certaine to make hot, yea, and certaine by coniunction, to make hot and drie, or to refrigerate and moist, or to heate and moist, or to refrigerate and drie, and that there is in euerie of them a difference, more or lesse, but in multitude infinite.

Notwithstanding they be contained within limites to their vse, which doe easilie comprehend them in the first order or degrée, or second, or third, or fourth, nolo of what degrée

Also, if they proue to cure those vlcers, whose substance is vtterlie perished, or else is vnperfect & diminished, in these also it followeth necessarilie, that they maye manifoldlie erre from curing reasonablie: for if that is lost by anie similer substaunce, it is necessarie that he who will looke to the restoring of this againe, be skilfull of vniuersal nature. But of these we shall hereafter speake, in the meane season I suppose it to be most euidentlie set out, that euerie one cannot rightlie cure an vlcer, and that the first indication, of all which is manifest to euery priuate person, is the least part of curing. For it is necessarie that by demonstration he hath learned, how that heate and colde, moisture and dryneſſe, be qualities actiue and passiue. And further to know all those things which we haue written in our bookes De Temperaments, or else where, in other volumes belonging hereto.

And hetherto our talke hath bene of the hollowe Vlcer, we onelie curing the hollowneſſe it selfe, for it is not yet set out what is the proper curation of an vlcer, but that shall also be performed after the same methode, because it is taken both of the temperament of the affected parte, and also of the facultie of medicines, and surelie both these doe depend of the Treatise of Elements, for if that be graunted, that in a methode the foure qualities are causes of generation and corruption, it shall not be lawfull either to haue begunne, either to procede, or to finish a methode: for trulie it belongeth to the Treatise of Elements, that thou mayest shewe the qualities, to doe and suffer naturallie. Therefore that we heretofore haue shewed, is now confirmed in this present talke, that no Phisition can consider of anie similer partes, without naturall knowledge or speculation, (but there is onelie set out of similer parts.)

Here now our talke doth somewhat insinuate, that neither in the instrumentall parts anie can finde out the perfect cure, which haue not attained the speculation or true knowledge. But this shall be more euidentlie set out in the worke.

The fourth Chapter.

But now it is time to go to the verie cure of an vlcer, which is alone or simple, the vlcer trulie shall be alone, if there be neither affect or accident present, but if the part vlcerate be not molested with flure, nor visited with ill iuyce, neither out of his naturall temperature, neither is there anie hollownesse, or yet losse of skin, for this thing a good sort of Phisitions do let slip, not vnderstanding howe there remaine two affects in the part, after the hollow vlcer is filled with flesh & made plaine, the one being the losse of the substance of the skin, the other, of the solution of continuitie. Therefore as often as this one thing commeth, that is, solution of continuitie, whether that be of the ouer skin, the Grekes cal it Epithermia, or whether it be of ỹ skin called Thermia, or it be the affect of the flesh vnder it, which is called an vlcer, it doth onelie require to be agglutinated, for if the sides of the skin be perfectlie ioyned together, there shal be nothing in the middest of a contrarie kind, like as in ỹ vlcer which is now filled, and is made plaine, for in this the sides of the vlcer touch not, but the skinne of all the exulcerate part is perished, which ought forsoth to be restored. But in that wound whereas there is division made with anie edged tole, there is onelie agglutination required, & not also the generation of skin. Therefore as often as we purpose to finde out the cure of a simple vlcer, we in this talke presuppose that the fleshie part is diuided, without losse of anie portion of the same, for it wanteth a bread skin, which we haue called in Greke Epithermia, which must be made by inducing a circatrize. Therefore it is necessarie both to regenerate this, & also to vnite it together, & so there be two things vnto which thou must loke as in an hollow vlcer, because there is a double affect in both. But peraduenture some of them will saie, how is a plaine vlcer knowen from an hollow? if there be both a double affect in either, & also a

double

double scope of cutting appointed, that is to saie, the multitude of the lost parts, where in an hollow vlcer, not onelie the ouer skin is perished, but also the skin it selfe, yea, and sometime no small portion of the flesh. In an vlcer filled, there wanteth not flesh, but yet outwardlie there lacketh his couering, but we will shew hereafter what the cure is of those kindes of vlcers, now let vs vnderstand what is ŷ due cure of an vlcer, in that it is onelie an vlcer, & hath no other affect ioyned with it, therefore for that here is onelie diuision put forth, it behoueth to ioyne the sides that are diuided, and not onelie to ioyne them, but to make them also to indure surelie, they which are ioyned shall remaine together two waies, when as some of themselues doth so remaine, other by ŷ helpe of other things, of themselues they onelie remaine, which doth grow together and close by the helpe of other, those which are gathered together, and so holden with anie glutenous thing, but those ŷ grow together must of force be naturallie soft. Vrulie such is both the flesh it selfe, and also whatsoeuer commeth of flesh, but whatsoeuer are hard & drie, their parts cannot grow together, but doth require some glue or band, whereby the sides ioyned may so remaine. But the cure of such bodies shal be set out hereafter. Here let vs proceede with our talke begun, of those which may be vnited, searching out also the cause of ioyning & closing, for like as in hollow vlcers there must be flesh ingendred, so in a simple vlcer that the sides may close. And nature trulie is the cause, that if thou dost exactly put together the sides which are separated, they will close together without anie outward labour, and now there springeth another scope for thee, to consider the bringing of the sides together, beginning with which thou shalt finde out, with what thou shalt bring this to passe, for thou shalt close them together which are separated, either with a roller, with two ends put about, or with stitching, or hookes, which the Greekes call Agkleras, or with some of these, or else all, it is necessarie that the roller which is put about bee not too softe, or will bee broken lyke Alga, (the Greeke writers doe call it Vrouothes, that it maye

salelie holde, neither yet so hard, that in compressing it may offend, then let not thy rolling or binding be so lose, that it cannot doe good, neither yet so straight, that by compressing it may cause dolour. These thinges if thou shalt obserue, without doubt the vlcer will close, if that it bée free from all iuyce or flure, or intemperatnesse, or inflamation, or anie other fault. But if for the greatnesse it cannot be that the partes diuided may from the bottome bée exactlie ioyned, neither being able with stitching, neither with splents, neither with rolling to come vnto them, or that there is Sanies nowe gathered there, or some dolour annexed, such an vlcer cannot close together by the onelie ioyning of the sides, when as that that is pained, causeth somewhat to flowe more, yea, and although that which floweth bée according to nature, yet the strength of the parte which are mékned, both for the dolour and paine, and also thorough the wound, cannot beare that which is iust, but are burthened, as though it were the contrarie, and hereof springeth superfluous Sanies, yea, and it is meruaile if there followeth not inflamation also, if there be Sanies collected in the middest of the sides of the vlcer, without paine, or that there bée anie meane place betwirt, which is voide of Sanies, but yet is filled with the aire, the Vlcer cannot bée adglutinated by closing together the partes diuided, when as the Sanies do deuour the vnion, and the voide places which are betwirt the partes to be ioyned, doe let the frontes of the inward sides to touch. Therefore at the least that those partes of the vlcer maye close, they require Natures helpe to bée filled with flesh, and surelie these are so little, if the sides of the vlcer bée rightlie ioyned, that it may be done in one daie, or in two at the most. Therefore for this time it behoueth to vse some deliccatiue medicine, which may drie the part, that it may consume the Sanies, if anie there bée, or if anie shall flowe into the voide places, to kéepe it back. Now therfore thou shalt cause me to call to remembrance ỹ medicine which doth incarnate & moderatlie drie, ỹ we may knowe whether ỹ glutinatiue medicine ought to be drier or cõtrary: truly ỹ incarnatiue medicine if it shuld cõsume al ỹ

blood

blond which floweth, it should by that meanes take away the matter it selfe whereof flesh springeth. But truelie a glutinatine medicine either needeth not at all the generation of flesh, or else verie little. Wherefore it behoueth it to be more desiccatiue than that which must incarnate, so that by this reason, there is but a small difference betwixt these medicines, but yet by another reason ther is great difference, in as much as that which doth incarnat, ought eftsones also haue a vertue abstersiue, whereby it may not onlie dry ỹ abundance of moisture, but also may take away all the filth: Aglutinatiue trulie neither may mundifie, neither purge, but to bring all the whole substaunce together. And medicines which be called Abstersiue and astringent, hath such facultie, for these surelie haue facultie to constrain and stop, and not to mundifie and purge, whereof it followeth, that when we studie to incarnate, we must chiefly flie an astringent medicine, because it fixeth ỹ filth more straitlie than may easilie be losed. Therefore wine is the best medicine for euery vlcer, in that it is an vlcer, and if it be not added that it is an vlcer, I suppose thou wilt vnderstand.

For it is onelie added for remembrance sake, least anie should thinke, not as defining anie thing necessarie, so that if thou shewest thy selfe mindfull of all those things, which in the former booke are set out, of naming euerie thing, and also of the subiects, there is no cause that hence forth I shal define such things vnto thee, it shal be abundantlie for me, if I onelie in euerie of them separate the simple effects from those that are compound, of which things I haue somwhat before spoken, and nowe neuertheless shall speake, not so much trulie for the things it self, as that many Phisitions deceiued by the word, thinke hollowe and vnequall, new and old, filthie, and cleane with inflamation and without inflamation, to be differences of vlcers.

Therefore it is necessarie to make distinction, which bee the proper differences of Vlcers, and which be complections of other affects, but of this a little hereafter. Truelie the wonted doctrine of the olde Physitions which I

would were now in vse, is altogether natural, for they shew the cure of euerie simple effect, but of them all, that doeth chieflie Hyppocrates, for the curatiue methode shall best proceede, if we shall speake seuerallie of euerie simple by themselues, & after shew another method of all compounds, as if there were two diseases in the order of diet, retaining and flowing, as Thessalus supposeth, when as we had spoken of the cure of either of them seuerallie, we must doe in like sort of these both ioyned together. So in like sort I suppose, because there is one kinde of all vlcers, in that they are vlcers, and also one other kinde of inflamations, in that they are inflamations, it behoueth to set out the cure of an vlcer by it selfe, and the cure of an inflamation by it selfe, & after to ioyne both cures together, which thing if we shall doe, truelie we shall finde by the methode declared, that euerie vlcer ought to be dried and bound, but yet not mundified, the hollownesse in the flesh also to bee dryed and mundified, but yet not to bee astringed.

Also after the same manner which wee spake of in hollowe Vlcers, wee shall for the portion iudge Nature, whether it bee softe and lose, or harde and drie, and impact, for the first, how much moyster it is, so much lesse need it hath of desiccatiues, the last howe much drier it is, so much the more it requireth vehement desiccatiues, and medicines astringent, the emperike I suppose, will heere make mention of children, and women, and delicate bodies, and will account young folkes Plowmen and Marriners, of contrarie sorte, but seeing that he vnderstandeth not that the medicine doth profite children and women, though the moystures of their complection and another, agreeth in lyke sorte, with Plowmen and Marriners, because of their drie temperament, neither can he gesse exactlie the cure of euerie bodie, neither yet finde out the cause of errour, whereby it doth come to passe, that he knoweth not how to goe to an apter medicine, when that which he first knewe by experience doth little profit.

And thus we haue brieflie spoken of glutinatiue medicines, and heere followeth another method pertaining to the

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preparation and composition of them, for by and by we applie to an hollow vlcer what we list, whether it be a medicine drie or moist, for we may strow it in euerie part of the vlcer, or else annoint it, but in woundes we cannot so doe, where there is a greate deepnesse, for as sone as thou hast ioyned the sides of the wound, thou canst not touch the parts which are in the bottome diuided. Therfore it is to be considered, whether the medicine be moderatly drie and astringent, but also whether it may come to the bottome. Cerussa and Litharge be moderate drying and astringent, but if thou doest strowe it vppon the wound like as ashes, thou shalt not profite, for the vertue of the medicine that is so drie, cannot come to the profunditie, therefore there is requyred some moistures, or else of some moisture medicine, that it may be plaister like, but these belongeth properlie to that speculation, which sheweth the composition of medicines, and not to that which sheweth the reason of curing. But if we shall neede it vnto this matter, we shall touch it in our worke hereafter.

The fift Chapter.

NOw will I turne again to the vlcer which requireth to be cicatrised, of which a little before we made mention, & the end of these also whereto we drawe, is of the like kinde ỹ an hollow vlcer is, for it behoueth to regenereate somwhat ỹ is lost, and not onely to vnite ỹ is diuided, but ỹ which is here to be regenerated, is after an other sort than in an hollowe vlcer, seeing ỹ the matter there is bloud, but here it is flesh, for that which is hollowe is filled by engendering flesh, whose beginning is bloud, and that vlcer is cicatrised that is alreadie filled by engendering skinne, which is made of the flesh subiect, and surely the flesh which may ingender in an hollowe vlcer, may be like to that which is lost, but the skin which shal be restored, cannot in all pointes be like ỹ which was before, but a thing like the skin, which also may supply ỹ office of ỹ

skinne, but yet is not the skinne in déde. And the cause trulie wherefore the skinne perished, cannot be againe ingendered, like as flesh and fatnesse be, is to be sought out of naturall problemes. But we must héere learne both how to imitate nature, and also the vse of the skin, and of this thing we will now shew the methode, and for that our purpose to couer the flesh with some naturall couerture, for that is to cicatrise an vlcer, either we must regenerate skin, or make the vpper part of the flesh like vnto skinne, but skinne indéde cannot be engendered, therefore let vs attempt that which may be done. But what waie shall we do this? forsoth by alteration, for we labour that some part of the flesh may no longer be flesh, but maye bée lyke skinne, but by what waie sayest thou, shall it be altered? forsoth by the helpe of some medicine, whose qualitie will alter, and héere against my will in this place, commeth the talke of elements, without which, neither can there be founde a medicine which can cicatrise, much lesse anie that hath vertue to incarnate and glutinate, therefore because the skin is both drier and thicker than flesh, if we shall drie and binde the flesh, we shall also make it like the skinne. And thus thou hast the summe of the medicine which doeth cicatrise, but this trulie is not sufficient, for glutinatiues be also dry and binding, there if thou doest marke the substaunce of things, thou mayst find how these differ from them, but for because in the agglutination of vlcers, wée must drie that which floweth, so that the sicke part may be frée from superfluitie in making a cicatrise, we do not onelie consume that which floweth, but also the moisture contained in the flesh, truelie it is conuenient that the medicine which doth cicatrise, bée a great deale drier than that which doeth agglutinate, when hée that will agglutinate hath his scope, that he doe consume the abundance of the moisture, which is according to Nature, he that will cicatrise, doth not take awaie onelie this, but also some parte of that which is according to Nature.

Therefore vnripe galls, and the Pomgranad rinde, & the fruit of ỹ Egyptiã spine, are moderate desiccatiues, Calcites &

æ Victū, & eris, Squāma, & Misi, & Fissum Alumen, be a great deale more vehement, and chifely Misi, & Chalcitis, but æris, Squamma, is more gentle, and yet æs Vstum, much more than this, and if thou doest wash it thou shalt haue a medicine lesse corrosiue, surely this also belongeth to the speculation of compounding medicines, which in order next followeth the Methode curatiue, for to know the faculties of Medicines. That truely must go before the curatiue Method, and we haue hereof intreated in an other place, but the composition of medicines must follow, for where vniuersally it is commaunded either to drye or make moyst, or to make hot, or refrigerate, and that it must be done either moderatly, or vehemently, or lightly, we haue vnderstode the faculties of euery simple medicine, it is conuenient to consider this by it selfe, and aloue, and also how any may mixe them profitably to his vse, and by this meanes there is a double knowledge of medicines, one that sheweth their vertues, an other of their composition and preparation, but we must retourne to that which yet remaineth of the Methode of Vlcers.

The sixt Chapter.

Here resteth as I suppose to speake of that superfluous flesh, which the most part of Phisitions call in Greeke Hyposarcosin, surely this sickenesse is of the kinde also of those which be in quantitie or magnitude, call it as it please you, by either name. Of this sort, was hollownesse, of which we haue alreadie entreated. Therefore like as that we call an hollow vlcer, is not one affect, but that the hollownesse and vlcer are two, so the vlcer that hath supercrescent flesh, is not one disease, but the supercrescent flesh and the vlcer be two, the magnitude which is against nature, sheweth the first indication, which we haue named the ways of finding out remedies, that is to say, the taking away of that which aboundeth, & this is performed by the onely helpe of medicines, and not

by natures diligence, for it is contrarywise that it was in engendring flesh, and agglutination, for they be iudged natures worke, we onely removing by medicines applyed, those things which doe hinder hir, but the taking away of superfrescent flesh, is no worke of nature, but is done by medicines, which doe vehemently dry: surely those medicines are next to those which doe vehemently mundifie, and also to those that doe ciccatrise, in so much that through erour, many take that medicine which taketh away flesh, for that which doth mundifie, or for that which doth ciccatrise. And that we go not from our example, if thou doest apply to a moist nature Misi & Chalcitis, thou shalt finde ỹ it will rather take away flesh than ciccatrise. Wherefore, if we in the want of other medicines, be cõpelled to vse these, in making a ciccatrise, putting but onely the point of our probe in it, being beaten into most exact lightnesse, in after applying to the partes which require to be ciccatrised, as it were in most fine flower. But if we intẽd to diminish that which ouergroweth, then we put it in more largely, truely Aerugo, can take away flesh more than these, in so much as it passeth ỹ boũd of ciccatrising medicines, but if thou doest burne them, like as they shall be lesse sharpe, so shall they be found more apt to make a ciccatrise, but if thou doest also wash them, they shall be yet more gentle. Thou remẽbrest one I thinke, which without reason did cure a filthie vlcer, with that notable grẽne medicine, mixing Honey with it, after many dayes past, he finding the vlcer as filthie as before, he voyde of knowledge, neither vnderstanding what to doe, for it chaunced that the filth was not purged, but also some part of the flesh vnder it, was diminished and dissolued, because the medicine was so vehement, (like an egregious Phisition) he added more Honney continually to the medicine, whereby it might more vehemently mundifie, as though the medicine before applyed, had not sufficiẽtly done it. It came to passe cõtrary, for how much ỹ more he made his medicine sharp, so much ỹ flesh subiect was cõsumed, so that the filth in the Vlcer which sprang of the dissolued flesh, the Phisition imputeth it to the medicine,

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as though it had not wrought, and his ignorance was not onelie in the curatiue method, but also in iudging, for if the vlcer be found to be in like sorte, most filthie and moist, of either medicine, trulie the hollownesse is made greater by the vehement dissoluing medicine, as also the vlcer is seene to haue swollen lips, and to be redde, and vered as it were with inflamation, and sometime also the patient feeleth manifest corrosion by such a medicine, but that medicine that doth lesse drie than is requisite, doth neither corrode, neither yet doth anie of these things rehearsed. I thinke it therefore euident by this, that an Emperike, although hee vseth most distinct experience, cannot artificiallie, where thinges prosper not, go to that which cureth by a right method, which I now doe institute and begin.

The seauenth Chapter.

FOR the Methode which the methodelesse Thessalians doe professe, thou doest know to be nothing but the bare name, voide of all effect, which seeing there is such and so manifolde a method in curing an vlcer, which they neither vse the differences of Emperikes in finding out remedies, neither as Dogmatists, taking indication of the nature of things to be done, but propounding that which the common people knowe, they thinke to haue declared a certaine method of curing vlcers, that is to saie, that an hollow vlcer requireth to be filled with flesh, the vlcer filled to be brought to a ciccatrise, that which aboundeth with supercrescent flesh, to be taken away, that which is filthie to be purged, ỹ which is cleane, to be either agglutinated or cicatrised. So farre wide be they, that they knowe not how to moist natures medicines, lesse drying are conuenient, as vnto drie complections, those which do more exicate. Therefore ỹ which hath appeared most manifest in all our whole disputation, we must againe repeate, ỹ we may be to him most attentiue, & that all other may vnderstand how much they haue erred that do corrupt the method of the olde

olde writers, I will begin with that vlcer which requireth to be filled with flesh, putting that one for example, because of it I haue last made mention, and after this I will speak together of the vniuersall curation, therefore I suppose one thing to be manifest, not onelie to them which consider by reason, but also to them which also follow experience, that euerie nature doth not require like medicines, but ỹ those that be weaker and more delicate, require more gentle medicines, those ỹ are more strong & drier, do in lyke sort require more vehement: so trulie standeth the case in those where a Cicatrize was to be made, and also in those which néedeth adglutination, for no delicate bodies forsoth can in anie wise suffer a medicine to vehement.

In the like discourse of our talke, it is euident that both the nature of the Patient is to be considered, and also that there is a proper curation for euerie man, and yet furthermore, the third thing, that is to saie, because there is an ineffable propertie of euerie nature, neither comprehensible by the most exact knowledge, he is the best Phisition of euerie particular patient, which hath gotten the method, whereby he may discerne natures, and also coniecture which are the proper remedies of euerie one. For it is an extreame madnesse, to iudge that there is a common curation of all men, as these most foolish Thessalians doe thinke, and for that cause they suppose, that all the Theoremes of Phisick are ordained, that is, they are such as skilfull men doe and performe, a farre knowledge of themselues, and that the art is a certaine knowledge of communities, and not properties, as though they should cure a vniuersall and not a particular man, therefore lyke as in all other, euen at the beginning they erre, so they erre also in this, for the generall or common man is not cured, but euerie one of vs hauing another complection and nature. But these truelie thinke ther is a cõmon cure of al men, I trulie iudge cõtrarie, for if I knew how to find out exactly euerie priuate nature, I would think my self to be such a one, as I conceiue in my minde, was Aesculapius.

But forasmuch as that is impossible, surelie I will goe as

as man maye doe, and I haue decréd to exercise my selfe, and doe also exhort others to doe the same, and the empe-rickes as much as they can, to learne those things that are common, so to draw néere to those that are proper, but yet how much they are wyde from the perfection of the thing, it is before spoken. For these notes for children or women, or olde folkes, or those that haue soft flesshe, and white, and such lyke, are not to be put as they think, for sure differen-ces, but rather how the bodie is affected, in moystures and dryneste, and it is conuenient as much as may, to allow the Emperick Phisitions both for many other things, and al-so for that they go as néere as they can, to the propertie of the sicke. For after all their other separations, which they make, they adde also that which is taken of custome, as though hereby they shall finde remedies, which are more proper for the pacient. But we will speake hereafter more largely of custome, when we shall proue the difference of custome, inuented by the olde writers, for the knowledge of the propertie of the pacients nature.

These with the rest, the Empericks receiue, and also do confesse, that the Phisition which visiteth the pacient, shall better cure him, than he who hath not séene the sicke. Yet for all that, when as they haue added all these things, they will not as yet, saye that they haue a sound and skilfull knowledge, of the proper curation of the pacient. But that most impudent Thessalus, onely vnderstãding that an hol-low vlcer must be filled, affirmeth the Theoremes of Phi-sicke to be constant and firme, although as before is saide, all men know at the least this thing, not onely they which now be after this Thessalus, as another Aesculapius, was borne, but I suppose also those that were before Deucalion, and Phoroneus, if these were reasonable, and besides, if they knew how a hollow vlcer is to be filled with flesh. Further, they were not ignorant, that he is a Phisitiõ, which know-eth those medicines, wherewith such an vlcer is to be filled with flesshe.

But if these medicines be inuented by experience, it is most certaine, that we must cure Empericlye, but if

they

they be found out by reason, then we must cure reasonably, for truely he findeth not out one medicine, and vseth now an other aptly, but if this our strife is with the empertkes, that truely which I began to say, true Phisicke it selfe doth make coniecture of the nature of the pacient, I suppose the common sorte call it in greeke Idiosyncrasian, and all they confesse it to be incomprehensible, and therefore they leaue the true arte of Phisicke to Aesculapius, and Apollo. Surely all this knowledge standeth of a double beginning, for an obseruatiō, the Emperickes take the beginning of those thinges which manifestly appeare, the Logicians truely of the Elements themselues. For that another medicine hath profited other, very children doe now well nere vnderstād, and reason which is grounded on the Elements, doth also confirme the same. For if thou doest make xv. differences in the complexions of men, by reason of excesse and defect, and that onely in moyst nature, truely it shall also be necessarie that thou knowest xv. differences of medicines, which thou wilt vse, of which some dryer more, and some lesse, whereby thou maist finde that agreeth to euery nature, and if also in dryer complexions there be put other xv. differēces, and thou require other xv. medicines also to these, thou shalt haue in all. xxx. medicines, which shall agree to xxx. natures, which onely he can rightly vse, which hath diligently exercised himselfe in the temperaments of bodies. Whether therefore, if all the bodie be of a dryer complexion, shal it be cured by medicines which doe more exiccate: if any part of the same be dryer by nature than the rest, shall it require lesse drying medicines.

Also whether is it here euident that what parte hath a dryer temperament, requireth dryer medicines, that which is more moist, lesse desiccatiues. And all this truely these methodlesse Thessalians doe let passe, which thinke one medicine to agree with euery part, truely the Emperickes how much in this thing doe they excell these Thessalian Methodicians, so much are they inferiour vnto true Methodicians and Logicians, although they in deede being taught by vs, haue also one medicine for Vlcers in the eyes, another for

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those in the eares, or ioyntes, or flesh, or onely skin, but that in those they cannot go to an other medicine, it may easely appeare by that we haue heretofore spoken.

The eight Chapter.

NOw seing that wee haue sufficiently spoken of these thinges, let vs againe returne to the beginning of our disputatiõ, and let vs mixe with an vlcer, all such affectes which are cõplicated with it, beginning first with intemperatures. If the exulcerate flesh, either beefore by any occasion, or in the time of ỹ vlceration, be made either more hot or colde than is meete, it doth require a remedie which doth not onely moderately drye, but doth also make hot or refrigerate, so much as the part affected is gone from his naturall state, when as it cannot come to passe, that either there shall be flesh ingendred in the vlcer, or the hollownesse filled, or adglutination to be made, or to cicatrize well, except the fleshe subiect be according to nature, neither was it spoken in vaine, that these are the workes of nature, but filthie vlcers may be mũdified, they that are supercrekent diminished, the flesh not keping hir naturall state, for that they onely are the workes of medicines. Wherefore thou must haue the more regard of the iust tẽperature of the vlcerate partes as often as thou wilt either incarnate, or glutinate, or ciccatrise, the motions of nature are to be obserued, which euery of these rehearsed, doe follow, but otherwise they shall not be obserued, except ỹ part be founde according to nature, as if there were inflammation.

With an vlcer, no man will attẽpt either to incarnate, or conglutinate, or ciccatrise, before the inflammation be expelled, so in lyke sorte I suppose, that if there be onely intemperateneſſe without inflamation, we shall not hope for any of ỹ forsaid, before this be cured. Therfore hereof springeth again a certain indicatiõ of ỹ finding out of medicines, which were before cõprehended, for all they were ficcatiues, but

but they did differ among themselues, by reason of excesse and defect, & it is not before defined, how forsoth they should make hot or refrigerate. But the Methode as it were, enforceth to search out also this thing. But it behoueth to marke, not onely whether it doe exciccate, but also, whether it doe greatly heate or refrigerate. Wherefore thou shalt eschew the vse of Altercum and Mandrage, and Meconium, although they excicate, as much as is méte for an vlcer, because they vnmeasurably refrigerate. Resin, and Pitch, and Asphaltus, although they doe moderately exciccate, yet they be moderately hot, therefore no man will vse these alone, neither otherwise than mixed with other, which doe gently refrigerate, making of all one temperate medicine. But if these thinges are thus, as truely they are, it is conuenient also to marke the temperature of the ayre, for this being as a certaine medicine comming outwardly to our bodies, if it be to hot or colde, it hinderth the cure. Therefore diligence is to be had, that the medicine doth helpe the excesse of it. Therefore Hippocrates vseth medicines of colder facultie, in the hot times of the yeare, and in colde times hotter medicines.

And here truely thou art not ignorant, howe a certaine dul methodician did cõfesse that he did marke how the ayre about the pacient was affected, in heate and colde, and yet not to suffer the times of the yere to be regarded, as though the names it selfe, of the times of the yere, did either profit or hurt, and not their temperament, or that the olde writers for this cause had not respect to it. But I thinke it abundantly shewed, that who so will by a certaine methode cure an Vlcer, he must of force both come to the first Elements, and also consider the times of the yeare, and the temperaments of bodies, not onely in the whole, but also in euery part.

Againe, we must repeat that, ỳ hath bẽn spoken of indication, which is taken of moist and dry, for like as the moist nature requireth moister medicines, and dryer natures drier medicines, so here ỳ hotter nature requireth hotter ayre, the colder requireth colder. For ỳ in those which are against nature,

nature, and those which are according to nature, there is a contrarie indication. For those that are according to nature shew the lyke, those that are against nature, contraries. If wee will conserue them, these must bee of force remoued.

The ninth Chapter.

AND thus I suppose ỹ I haue clérely taught that he who shall well cure an vlcer, must consider the complection of bodies, times of the yeare, & natures of partes, also that the first indication curatiue is taken of the onelie effect, but for all that the remedies cannot be thereby found out, except we first do ascend to ỹ elements of bodies, and way the patients temperament, not onely of the bodie, but also of the sicke part, and considering with these the temperature of the aire, which truelie doe both pertaine vnto the present state, and also vnto regions, that there are together in one curation contrarie indications, & how to vse them it shall be set out hereafter more largely, notwithstanding now also it shall not be from the purpose, to speake also in this place thereof in few wordes, for I do think no meruaile, although the patients complection be moister, and yet the part affected to be drier, or contrariwise ỹ the part be moister, & the tẽperature of ỹ whole bodie drier, in like sort than, the part is of contrarie temperament, in hotnesse & coldnesse with the whole bodie, therefore like as if the whole bodie were in meane temperature, which we haue called best, we should not neede to alter anie thing in medicines, touching the nature of the Pacient, so whereas the bodie is some drier or moister, or hotter or colder, than is requisite, it behoueth so much to increase the force of medicines, as the bodie is declined vnto natural intemperatnesse. We haue not forgotten to thinke what naturall temperatures is, & what is against nature, for wee haue spoken of ỹ inother our workes, but chiefflie in ỹ booke which is intituled, of inequall temperatures, admit therefore ỹ the whole complection of ỹ sick bodie is more moist,

and for that cause require medicines lesse desiccatiue, & that the affected part is in the number of those which are more drie, such we haue said be the parts lesse fleshie, as about the fingers & ioynts, also the parts about the eares, nose, eies, & téeth. And to be briefe, wheras there are many cartilages, & cotes, & ligaments, & bones, & nerues, for héere is no fat or flesh, or but verie little, the indication within these is héere taken of the nature of the part, is contrarie to that which is taken of the nature of the whole bodie, wherfore if so be that howe much the complection of the Patient is more moist than is requisite, so much the parte affected is more drie, we shal neither adde, neither yet subtract from the medicine, but we must vse such a medicine as we wold apply to the vlcer, made in the parte of meane temperature, and where the bodie is moderatlie temperate, but if the part be so much the more drie than is requisite, as the temperamẽt of the bodie is moister, we must so much increase ẏ drinesse of the medicine, or the temperament of the part, excéde the temperament of the whole, as if the exulcerate part excéd in drinesse foure parts the iust temperatnesse, & that the patients nature is thrée degrees moister, it is manifest ẏ the part which is nowe vlcerate, requireth a medicine one degrée drier, than where as the part is temperate, it is euident ẏ all these are taken by coniecture, and that he shal best coniecture, which is exercised in reasoning of these, & trulie in all such there are together at one time contrarie indications, neither shall I néed to speake also of those indications, which are taken of hot & colde, because they may be vnderstood by ẏ which is spoken. Trulie in other, the indications are separated by times, in which there are finished, & it behoueth also chieflie in the beginning of the curation, ẏ one to cease, & the other to doe his part, example, if an vlcer bee with hollownesse & verie filthie, there is a thrée fold affect, against nature, the vlcer, the hollownesse, & the filth, the order of curing in purging the filth, because the vlcer cannot be anie thing adglutinated or filled with flesh before it be cleane, the cure of the hollownesse hath the second place, for if we shal either adglutinate or incarnate, or to speak briefly

ly, cure the vlcer, we cannot fill the hollowneſſe: imagine therefore, ꝑ not onely theſe three do infect the part, but alſo inflamation or Eriſipelas, or Gangrena, or ſome intemperatiues, either ſimple or compound, whether or no it is manifeſt, that the vlcer cannot be filled with fleſh, before ꝑ this be taken awaie, it is before ſaide, that generation of fleſh commeth of that which is ſound vnder, but new fleſh cannot grow, of that which inflamation infecteth, & is intemperate, & to conclude that which is ſick, therfore there is of them to be conſidered a three fold end in all ſuch coniuctions, one as it were taken of the cauſe which is to come after, another hath the reaſon, without which not, the third is named ſuch as do inforce and accelerate. For ꝑ iuſt temperature of the fleſh, is as it were the cauſe, which maketh that is vlcerate to growe with it, and filleth the hollowneſſe. The pureneſſe & clærneſſe of the vlcer hath the place, without which not, for the filth letteth, this doeth prolong the cure, the hollowneſſe hath the place to the vlcer, without which not, for if the hollowneſſe be not filled, the vlcer cannot be cicatriſed, therefore if thou doeſt regard theſe, thou ſhalt finde the order of curing, as if inflamation & hollowneſſe, & an vlcer, & filth, be found together in the part, we muſt firſt cure the inflammation, ſecondlie the filth, thirdly the hollowneſſe, & laſt the vlcer. And truelie in the rehearſed, both the order and the inuention of things to be done, is taken of theſe, but the indication of that which enforceth or accelerateth, is not here reckoned, in other truly it is, for that affect is firſt of all to be cured, whereof there firſt followeth perill to the man, yea, & not onely firſt, but onely it, as if the head of a muſcle be prickt, there followeth conuulſion, which cannot be remitted by the helpe of conuenient medicines, for thou ſhalt heale the conuulſion, ꝑ muſcle being cut ouerthwart, notwithſtanding thou haſt corrupted ſome motion of the part, in like manner when ther immoderatlie floweth bloud out of a veine or arterie, if thou cutteſt the whole veſſell ouerthwart, although thou canſt not cure the Vlcer, yet thou haſt taken awaye the perill, which ſhould haue come through the fluxe of bloud.

Now we are constrained after to cut a nerue ouerthwart, as often as we see either conuulsions, or madnesse, or both, being great, and hardlie curable, to follow after wounding. In like sort, where luxation chaunceth in anie of the greater ioyntes, we cure the vlcer, but leaue the luxation incurable, for if we wold cure also this, conuulsions would follow. The third end to put before our eies of curing is, vnto that which enforceth & accelerateth, and is contrarie to the other two rehearsed, neither is it all one, to consider anie thing as the cause, or as that which hath the place, without which not, or as that which enforceth and accelerateth. But we haue said, that which enforceth is such sometime, that it leaueth the other affect vncurable, and also that both we make the affect, partly in the pũcture of a nerue or tendon, or profusion of bloud, of the vessels, and partlie in the muscle whose head is wounded, for wheras the luxation is with the vlcer, we make not the affect, but leaue onelie that vncured which is made. But we shall speake more exactlie of these hereafter.

The tenth Chapter.

AT this present it pleaseth vs to go to the difference, and to comprehend briefflie our propounded talke, that we ouerpasse not anie indication of inuẽting remedies, if anie yet remaine. Therfore they doe call as differences of vlcers, an vlcer without inflamation, & a rotten vlcer, and a deuouring or corrosiue vlcer, & an vlcer with Gangrena and Erisipelas, and a Cancerous vlcer, & an vlcer with paine, & an vlcer voide of paine, & such like, if anie cõming forth fetteth out the emperike curatiõ, & thinking no other thing, nameth them differences of vlcers, we wil not contend with him, for we haue said a thousand times, ỹ it behoueth not to contend about names, but if he goeth about as it were, to shew anie artificiall things of indications, he is to be taught that all the rehearsed affects be compound, & that ther are other differences of a simple and sole vlcer, vnto which there is no other affect ioyned,

for

for if there be diuision with anie edged thing, if the forme of that which did wound be imprinted in the part diuided, there shal truly be so many differences of vlcers, of oblique, right, retort like a brittle, crooked like an hooke, and so being euerie waie, and all these differences be of the figure. Againe, there are a thousand other differences of the magnitude, for an vlcer both is, and is also sayde to be bigger or lesser than another, also great & little, also a short & a long, a shallow and a deepe, and in euerie of these, both that it is more or lesse, such a one whether it be in ỹ differẽce of space, or magnitude, or quantitie, or call it after what manner you will, but if this so be, then trulie an vlcer equall or inequall, shall be with the profunditie of diuision, for if it chaunce that the thing being cut in length, the higher parte of the diuision may go in deeplie, the lower part to be in the vpper part of the bodie, or contrarie, the higher part of the wound to bee in the vpper part, the lower to bee deeper, also these, that is to saie, to bee diuulsed in some part, or to tall, and to haue bene cut, and where that wound went ouerthwart vnder the skinne, the one part of the vlcerate parte to be seene, the other to be hidden vnder the skinne, and that to be in the higher partes or lower, or sides, all these be differences of vlcers. Againe, of the time there are other differences of vlcers taken, as an olde or new vlcer, of small or long time, and in all these, the reason of more & lesse is to be numbred. And these differences are taken of the nature of the vlcer most proper, which are taken of the substance of the thing, for those that are taken of the figure and magnitude of diuision, and that either in length or deepnesse, or in both dimensions, also in these with equalitie or inequalitie, these that come outwardly, and hath the place of ỹ without which is not, also of the time in which the vlcer is made, for so one is called a new, another an old vlcer.

Also of that that either part or all, is not seene or seene, also of the generation, for that is all cut, or all broken, or part cut, and parte broken, and if thou wilt perceiue the differences of the place in which the vlcer is, as in the end

of a muscle, or beginning of a muscle, or middest of a muscle, or that the skinne is vlcerate, or that the vlcer be in the liuer or bellie, they be forsoth differences of vlcers, not taken of the proper nature of them, but of the places in which they are, but when anie saith the vlcer is not infected with inflamation, or pressed with supercrescent flesh, or hollow, and thinketh that they be like those which lately I rehearsed, he must of force be deceiued in the curatiue method, for in Greeke Phlegmon Elcos, by the forme of speech hath the like figure of interpretation with a little vlcer, but yet that which is meant thereby is not alike, for deepe and hollowe when we speak of an vlcer, we shew these proper differences, but Phlegmon is not at all the difference, when as the part may be infected with inflamation, yea, whereas there is no vlcer, so that I thinke it lawfull to chaunge the forme of speech, if thou wilt saie, an vlcer with inflamation to haue come to anie man, thou shalt goe nérer than to the nature of the thing, and shalt interpret it more clérely, but not if thou shalt saie, some with bignesse and some with littlenesse, to be made, for thou maist speake more euidentlie, and after the nature of the thing, if thou shalt saie he had a great vlcer, and a little, so that if it maye be done, that the forme of speech be chaunged, both more conuenient to the nature of the thing, and more manifest to the hearers, we shall not leaue of, whereby it may lesse be done, for the waie to flie deceit in things, is that, to vse defined speech, therefore what methode may we appoint, in such there is to be noted a certain precept, and as it were, a scope, whereby the diligent may easilie discerne by and by, whether anie speaketh of the difference of anie affect, of the ioyning of another affect.

Therefore let this be to thée a difference, that which may seuerallie and by it selfe stand, that shall neuer be difference of anie other affect, therefore magnitudge, littlenes, equalitie, inequalitie, time, and figure, be of the number of those which happen to other, but an vlcer, & inflamation, & Gangrena, and corruption, maye stande seuerallie and by themselues.

To There

There are certaine affects of our bodies against nature, as chance necessarily to affects, for vnto al these it followeth necessarily ỳ they be either little or great, or equall, or inequall, or new, or olde, or they appeare evidently, or they are hid & not seene. To be infected with inflamation, is not of ỳ sort which happen to an vlcer, as neither to begin to putrifie, or infected with Gangrena, all those be in the number of diseases, for they are affects against nature, & corrupteth the action. Againe, there are other as it were, differences of vlcers spoken of, as a tormenting vlcer & a filthie vlcer. But here also is some compound shewed, but after another sort than was spokẽ of an vlcer infected wt̃ inflamation or a rotten vlcer, for here inflamation and putrefaction be affects, their dolour & filthinesse be of the kind of accidents: in like condition whẽ we saie, Cachochimõ vlcus, that is, an vlcer infected with ill iuyce, or an vlcer vered with fiure or corosion, ỳ cause is coupled with the affect. And hereby it is manifest, that the first & simple infirmities void of cõposition, be as it were the elements of the curatiue method, which is now instituted. Wherefore the rather I haue numbred all such infirmities, in our cõmentaries of the differences of infirmities. Trulie all is one, whether thou call thẽ the first or simple, when that which is first is simple, & that which is simple is first, & therfore elementarie. There is an indication taken of the differences, although not of all, for a new or olde vlcer sheweth nothing, although some thinke contrarie, but these deceiue themselues, not otherwise than in the order of diet, where they affirme, that there is one indication in the beginning, another in the augmentation, another in the vigor, & another in the declination, of which seeing hereafter I shal more largely intreate, ther is no cause why here I should make more words, yet for all this I wil here ad ỳ shal serue ỳ time present. They think ỳ a new vlcer, whẽ as it is free frõ anie other affect, & hath no accident ioyned with it, doth shew another curation than an old vlcer. But ỳ is not so, for in ỳ it is onelie an vlcer, and no other thing, it is such a one as hath no hollownesse, or dolour, or filth, and is free from euerie other affect, doth onelie

require the cure of an vlcer, whose end set by vs, is either vnition, or agglutination, or coition, or continuation. For I haue a thousand times said, that thou maist cal it as thou pleasest, so that the thing it selfe be not chaunged, therefore this kinde of vlcer, whether it be new or olde, requireth alwaie the same curation. That difference which is taken of the time sheweth nothing proper at all. But if the vlcer hath hollownesse deeplie hid vnder the skinne, it behoueth to consider whether it be in the higher part, that the matter may readilie flow out, or in the lower part, so ỹ it is there stayed. The cure of that vlcer where ther is no flure, is like the cure of other. But it behoueth that we make certaine issuing out where there is none, and that is two waies, either the hollownesse being cut in the pendent place, onelie opened, both the nature of the partes, and also the bignesse of the vlcer shal shew, when as either of them must be done, for if the places themselues make the cutting dangerous, and the vlcer shall be great, it is more conuenient to open in pendent place, but otherwise it is better to make incision, and wheras there is an issue, let the rolling be begun aboue, and end beneath. We haue heretofore spoken, that the difference of vlcers which is taken of all the wounded partes, is verie necessarie to shew the cure, but the indication was of similer, this which I now speake of, is as it were of instrumentall, trulie we will in the bookes following speake more largelie of that indication, which is as it were of similer bodies, or as of instrumental. Now we must goe to the proper differences of vlcers, and define of it, whether it be ouerthwart, or right, or deep, or shalow, or little, or else great. Vlcers made ouerthwart, for that their lips do gape more, and are asunder, do require to be more diligently ioyned, & therefore we must vse both stitching and hookes. Those that are made in the length of ỹ muscie, if thou bind it with a roller of two beginnings, thou shalt not neede either stitching or hookes, but if thou wilt otherwise binde it, vse thou either stitching or hookes. Few stitches shall in this suffice. And thou shalt cure greate vlcers with vehement desiccatiue medicines, if thou remembrest that

which

which before is spoken. The medicines which doe moderatly drye, will abundantly heale small vlcers. Dæpe vlcers be euer also great, therefore they must be rolled with two beginnings, and the lippes of it be spedely adglutinated, and those which are both verye dæpe and also long, as they are great two wayes, so doe they shew a double indication, therefore they require vehement siccatiues. Neither ioyne thou the lippes to some together, and rolle it with two beginnings, and take dæpe stitches.

In like sort, if there come many differences together, of which euery one hath his indication, it is expedient to vse them all, so ỳ they be not contrary. But if they be contrary among themselues, wé haue heretofore shewed how it behoueth them to be denied of these, but wé will more largely set it out hereafter. And now it séemeth good in this place to ende this third booke: In the fourth, which shall follow, we will dispute of those affectes which for the more part accustome to follow vlcers, and with these there shall be set out the curations of inward causes.

FINIS.

THE FOVRTH Booke of Galen, called

in Greeke θεραπευτικου, and in Latine,
Methodus Medendi.

The effect of the same.

1 The right method of curing malignant & stubburne Vlcers.
2 What Vlcers be hard to be cured.
3 The method of curing an vlcer difficill to be cured, by the reason of the intemperancie of the flesh.
4 The curation of an vlcer, when as the part is exulcerate, with a tumour against nature.
5 The method of curing another affect, when as ill humours doe flow to the particle.
6 How a man may know in certaine diseases the originall cause.
7 The opinion of Thessalus in the curation of malignant vlcers.
8 That of time no indication ought to be taken, contrarie to the opinion of Thessalus.
9 The curation of malignant vlcers, according to the sentence of Hippocrates.
10 That an ill affect comming to the vlcer, ought first to be cured before the vlcer be taken in hand.
11 The curation of those affects that flow to the vlcer, according to the sentence of Hippocrates.
12 What indication ought to be taken of the scituation and figure of the parts.

The

The first Chapter.

WE haue said that there is one kind of disease that is called solution of continuitie, which cõmeth into all the parts of the bodie of mankind, howbeit it hath not one name in them all. For solution of continuitie in the fleshie part, is called an vlcer, in the bone a fracture, the Grækes call it Catagma, in the nerue, a conuulsion, the Grækes call it Spasma. There be of the same kindes of Solutions, which the Grækes call Apospasma, Regma, & Thlasma. Thlasma in the ligament, Apospasma & Regma in the veines and muscles, because of anie violent stroke or grieuous fall, or anie other great motion. The solution of continuitie, called Ecchimosis, in the Græke, commeth most often with concussion and ruption. Sometime solution of continuitie commeth by opening the orifices of the veines, in Græke named Anastomasis. Also it commeth of that which is called of many Diapedisis. Other solutions of continuitie happen of Erosion, in Græke called Anabrosis. But it is a disposition alreadie medled and composed with an other kinde of disease that consisteth in the quantitie of the partes, as before hath bene shewed, when as we did intreate of hollow vlcers, which doe proceede of two causes, that is to saie, of Exition and Erosion. It is manifestlie knowen by what meanes exition commeth. And if erosion abound inwardlie, it commeth of Cachochimia, if outwardlie, it is done either by strong medicine or fire, it behoueth then, as is said before, to take diligent hæde, and discerne the simple diseases from the compound, for to a simple disease, a simple remedie is conuenient, and to a compound disease, a compound medicine.

And we haue said before, what method must be kept to cure cõpound diseases, yet notwithstãding it is not inough to

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knowe the generalitie of the said methode, but to be exercised in all parts thereof. Seeing then that in the same is nede by manner of speaking of sundrie perticular methods, because that euerie kinde of disease hath his owne methode, then that which resteth of the curation of vlcers, must bee performed in this booke, taking the beginning heere.

Euerie vlcer is simple and alone, without other dispositions and affects with it, or it is with some other disposition, or diuerse, whereof some haue not onelie stirred vp the same vlcer, but hath augmented it. The other are, without which the said vlcer cannot be cured. Of thē we haue spoken heere before, we shal speake in this present booke of the dispositions which augmenteth the vlcer, in the which lyeth double counsaile of curation, that is to saie, either to take the said dispositions all wholie out of the bodie, or to surmount the incommoditie that aboundeth in it. The which thing may be easilie done, if the dispositiō be little, but if it be great, ỹ vlcer may not be cured, vntill ỹ same disposition be taken awaie. Wherefore we must diligently consider, what the said affects and dispositions be, and how many in number, in taking our beginning, as is sayd before. Euerie vlcer is by it selfe alone, or with hollownesse, ỹ the flesh being subiect be natural, and that there be nothing betwirt the toyning of the lips, that may let ỹ conglutination therof, which oftentimes happeneth either by haire, a Spiders web, mattier, oyle, or such lyke things, that may let the toyning together.

And these things are as Symptomata and accidents of the sayd wound, which if they be present, maye hinder the curation, but if they be not, they let not, but the disposition of the flesh, is cause of that which followeth. For with the same flesh, and by the same, lips that were asunder are closed, and the hollownesse filled.

It behoueth then that the sayd flesh be naturall, because that these two things may be wel and commodiously made perfect. Then it is naturall if it kéepe his owne temperament, which thing is common to all other partes, for it behoueth that the flesh subiect be wholie temperate, as well

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to close the vlcers, as to fill them with flesh. But is that inough I praie you? Must not the bloud that commeth to it be good also, and moderate in quantitie? I thinke this trulie to be true. For that bloud which is corrupt, doeth so differ from agglutination and filling the flesh, as also sometime to exulcerate and erode the bodie. And if it be ouermuch in quantitie, it engendereth excrements in the vlcers (as we haue before spoken,) and hindereth the curation. And also there be three kindes of vlcers which are difficill and hard to be cured. The first aboundeth by the vntemperature of the flesh, being subiect. The second by the vice & ill qualitie of the bloud comming to it. The third, of a great measure and quantitie of the said bloud. Ought not the diuision to be made thus or otherwise? That is to saie, the cause wherefore some vlcers are stubburne and difficill to be healed is, for the miscemperance of the flesh exulcerate, or else for the gathering of humors vnto the vlcerate part. Yet againe the miscemperate flesh ought to be diuided into two differences. The first is, when ỹ flesh being subiect is out of his nature onelie in qualitie. The second is, whē with the euill qualitie it hath tumor against nature. The flowing of humours is diuided into two differences, that is to saie, into the qualitie and quantitie of humours. Sometime diuerse of the said dispositions are mixed together, and sometime all. But the methode for to cure them, ought not to bee giuen all together, but each one by himselfe.

The second Chapter.

AND if the distemperance of the flesh bee drie, moderate it with bathing and wetting intemperate water. But at all times that this remedie shall be vsed, the end of the bathing and wetting shall be till the particle come ruddie, and rise in a lumpe. Then cease the bathing and moistting, for if you bath it anie more, you shall close the humour againe that was lo-

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sed, and so you shall profit nothing. Likewise the moistning facultie of medicines ought to be greater than is accustomed in a whole part. If the flesh be more moist than naturall habitude, you must haue regard to the contrarie, for the facultie of medicines in ỳ case ought to be desiccatiue, and to vse no water. But if thou must wash the vlcer, take wine or Posca, that is to saie, Oxicratum, or the decoction of some sharpe hearbe. Likewise you shall cole the pride of ỳ flesh that is to hot, and heat that which is to cold, you shall know such intemperatures, partlie by the coulour, and partlie by fæling of the diseased patient. For sometimes they confesse they fæle great heate in the particle, sometime manifold coldnesse, and so delight themselues in hot or colde medicines. And sometime appeareth rednesse, and somtime whitenesse. But to distinguish these thinges, it is not the duetie of this our proponed worke, in the which worke we shew not the method to know the affectes, but to cure them, in such wise ỳ by consequence of words, we bee come vnto the said methode, to knowe the affects. Againe let vs returne to our purpose.

If anie parts are vlcerate with tumour against nature, first the tumour must be cured. What ought to be the curation of all tumours, we shall saie hæreafter. Presentlie we shall intreate of that which is ioyned vnto vnkind vlcers. But when the lips of the vlcers are discoloured and somewhat hard, they must be cut vnto the whole flesh. But if such affect is like to proceed, further deliberation must be had, least that which doth seeme to be repugnant vnto nature, shall be cut out, or in longer space to be cured, & without doubt in such a case it is good to know ỳ patients mind. For some had rather to be long in curing, than to suffer incision, and other are readie to endure all thinges, so that they may the soner be made whole. Likewise hære shal be spoken of the ill iuyce which floweth to the exulcerate part, and in as much as it is a malignant and a wicked humor, it shall be spoken of hæreafter in his owne place. When as therefore the humour which floweth to the vlcerate parts, is not farre of, nor doth abound in qualitie or quantitie,

titie, it shall be then conuenient to direct it, and to restraine the flure which commeth vnto it, and also to cole the heate of the parts that be nére the vlcer. Furthermoré, you must behold the ligature or rolling at the vlcer, and leading it to the whole part, as Hyppocrates commandeth in the fractured bones. Also that the medicines that are ministred to the sayd vlcers, must be more stronger than they that are applied to a simple vlcer. And if the flure of humours wil not staie with conuenient medicines, then you must séke further the cause of the said flure, and take it awaie. If the flure come by weakneſſe of the member that receiueth it, the sayd weakneſſe must be cured. And such curations also shal be proper for the vlcerate part. But if the cause of the flure be through the abundaunce of ỹ bloud, or of the ill disposition of all the bodie, or of anie of the superiour parts, you must first take awaie the said causes. The weakneſſe of the part, forth of which abundance of iuyce doth flow, cõmeth whole of the intemperancie, & not altogether. Wherof it followeth, that the vlcerate flesh is only intemperate, and not weake and féble, & sometime it chanceth both the one & the other. For the great intemperancie is ỹ cause of the imbecilitie of ỹ affected part, the which intemperancie is cured as is aforesaid, in refrigerating the heate, humecting ỹ dry, warming the cold, & desiccating the moist. And if the place be too colde & moist together, the medicines must be in warming & drying together, & so of the other intemperances, in putting away euery qualitie ỹ surmounteth by his contrarie. The reason is: Euerie thing ỹ behaueth it selfe wel, is according to nature, not only in liuing things, but in plãts, & also in al other things ther is an equality, which ỹ Grécks cal Simmetron, & without exceſſe of al vicious humors. For the thing where nothing can be taken fro or put to, neither anie part, or anie qualitie, it is all perfect in one equalitie: contrariwiſe, the thing that must haue taken fro it, or elſe somewhat added to it, is not in a naturall & perfect estate. Wherefore it is not possible to cure rightlie, but in taking awaie that which is exceſſe, & putting to it ỹ which lacketh. In another place we must speake of ỹ ouermuch or lacke

of

of things,but when anie qualitie is ouer much,it is necessarie that the other qualitie contrarie to him,ouercome him againe,and the corruption of humors or intemperancie,bee remoued in restoring the said qualitie that wanted, for in cooling that which was too hot,thou shalt restore that which lacketh,& diminish ỹ which was too much abundant.Thus it is necessarie that the curation of the things that are put farre from their naturall habitation,by some intemperancie,be made perfect againe by thinges of contrarie vertue. And thus the flesh or anie part thereof, wherein is flure of humours,because of weaknesse, ought to be made in this manner,(as is sayd before)and when the intemperancie is cured,then procéde to the cure of the vlcer, first curing the intemperancie,as if it had come without the vlcer: By the which thing it is manifest,that all such curation is not proper to the vlcer,but to the intemperancie.

Likewise if anie flure of humours happen to the vlcerate partes,as wel by the occasion of anie perticular member,as of all the bodie, whereunto the bloud or anie ill humours doe resort, first, remedie must be had either to the particle that is cause of the flure,or else to the whole bodie. Thus then we shall cure first the varices,that are often resorting vnto the vlcered place,before you cure the vlcer,and then afterward you may the easilier cure the vlcer. Likewise in them that haue a disease in the splene, or in anie other notable part,first it behoueth to cure the sayd parte, and then after to procéde to the curation of the vlcer, howbeit none of the curations hereof is proper to the vlcer,but some other affects or dispositions, that either engendereth the vlcer,or that nourisheth and conserueth it.

The third Chapter.

BVt now I thinke it time to define that there is no indicatiō of outward,or(as they terme it)of primitiue causes of curation, but the indication or curation to haue his beginning of the affects it selfe. But those thinges that

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ought to be done particularlie, are found out either of that which the indication sheweth, either of the nature of the affected part, or of the temperature of the aire, or other like things, but to speake briefflie, no indication may be taken of things that be not yet come. But forasmuch as we ought to know the affect, that is not manifest vnto vs by reason or wit, we are often constrained to enquire of the extreme and primitiue cause. For this occasion the vulgar people supposeth, that the saide primitiue cause is Indication of curation, which is altogether otherwise. As it appeareth likewise in those, where the affect may be exactlie knowen. For if Ecchymosis, or an Vlcer, or Erisipelas, or putrefaction, or Phlegmon, bee in anie parte, it is a superfluous thing to enquire the efficient cause of these diseases, except they be remaining. For in so doing we shall cure that thing which is alreadie finished, and shall prohibite the efficient cause to proceed anie further. But if the said efficient cause which produced the effect, hath no longer biding there, then we shall remoue awaie the affect. For to put awaie the cause that is not there, it were impossible. For curation appertaineth to the thing present, as prouidence to the thing to come. For that thing which doth not now hurt, neither is to be feared that it will hurt hereafter, is out from both the offices of the arte, that is to saie, from curation and prouidence. Wherefore in such thinges there ought to bee no searching of anie indication, neither yet to cure, nor to prouide (as is sayd before) notwithstanding the knowledge of the primitiue cause, is profitable to vs in things vnknowen. Neuertheless the Emperikes take sometime the primitiue cause as parte of the course of the disease, that the Greekes call Sindrome, wherein they haue obserued and experimented ỳ curation, as in that that hath bene hurt with a mad dog, or venimous beasts.

Thus doth also some Dogmatists, which doth affirme to cure such diseases by experience onelie, without rationall Indication, for they take the cause primitiue, as part of all the Syndrome and vniuersall course: but the primitiue cause serueth nothing to the indication of curing, al-

though it be profitable to knowe of the nature of the disease, to them that haue not knowen the nature of venimous beasts, by vse and experience, and thereof taketh indication curatiue, trulie the outward cause of curation bëing knowen, doth nothing profite to the indication, but to the knowledge of the present affect. For put we the case that we knowe that the venime of a Scorpion is of a colde nature, and for that cause, as of a colde thing, I take Indication for the remedye; howbeit the case is suth, that I haue no signe, whereby I doe vnderstand that the bodie is hurt of a Scorpion: it is manifest that if I doe knowe that the bodie is hurt of a Scorpion, that then I would inforce me to warme all the whole bodie, and also the part affected, without abiding for anie experience, in taking mine indication of the nature of the thing. We haue declared in the booke of Medicaments, wherein it behoueth them to be exercised, that will take anie profit of these present Commentaries, no such facultie can be fond without experience. Truelie it should be a gifte of felicitie, if anie hauing the sight of Litargerium, Castoreum, or Cantarides, forthwith to vnderstand their vertues: For like as in all things is committed error, as well by those that excëde, as by those that lacke, so hëre (as the Prouerbe is among the Grëkes) this Thiapauson, that is to saie, they differ among themselues. Also they affirme, that the vertue of medicines is not yet knowen, and that after so great experience, & the other that suppose and saie, that the saide vertues be knowen onelie by experience. The first speaketh vndiscrëtlie, if that be a thing imprudent, to affirme a thing impossible, & the other be altogether stupidious, sturdie, and folish. But for this present time we will saie no more, because I haue spoken more plainlie in the third booke of Temperamëts, & also in the bookes of Medicaments. Neuertheless for the knowledge of diseases, some primitiue causes are profitable, but after that the present disease is altogether knowen, then the cause primitiue is totallie vnprofitable.

Now we haue declared that it doeth not become vs to meddle and confound both the doctrines together, but the

Emperikes

Empirikes ought to be spoken by themselues, and the Rationals by themselues. We must now call to mind, because we haue purposed in this present Commentarie, to intreate of the doctrine Rationall, although to some things ỹ we do saie, we doe not adde absolutelie that all be not true, but onlie after the sentence of the methodicall sort: but that euery man ought to adde and reason that thing by himselfe. And at this time we haue said that there is no cause primitiue, which is profitable to the Indication curatiue, although it serueth well to the knowledge of the disease. And we confesse that the cause primitiue is part of the Syndrome, and of all the Empirikes course, that they cure all diseases by reason & by experience. But in all ỹ we shall saie hereafter, it is not necessarie to adde such words. Then let vs returne to our first purpose, in taking the principall indication certaine and vndoubtfull, whereof we haue also vsed here before, as we haue said, that the disease ỹ requireth to be cured, iudgeth the end whervnto the Surgion ought to intend, and of the same all other indications are taken. Wherefore we haue begun to speake, that the said indication hath no manner of affinitie with the cause primitiue: for put we the case that anie vlcer be come of a flure in anie part, then it is manifest that the sayde vlcer proceedeth of corrupt humours, for nature is accustomed so for to doe in diseases, when she purgeth the bodie, and sendeth all the corruption to the skinne, in such sort, that the skin is vlcerate, and all the bodie purged.

What is then the curation of such vlcers? certainlie as of other vlcers, wherein no corrupt affect or disposition is, which the Grækes call Cacoethæ. But if it be so, it is euident ỹ no indication is to be taken of the cause which hath excited the vlcer, but if the vicious humour remaine, some indication might then be taken of the saide cause, for otherwise it should be an absurde thing, ỹ that which is no more remaining, should require curation, or if he shuld shew curation where there is no nede. Wherefore it is a strange thing, and wholie against reason, to saie that the indication curatiue ought to be taken of the cause primitiue.

And for because that the said Indication is not taken of the same cause, it is euident, that it must be taken of the cause present.

But what is such an Indication? forsoth if a man will properlie define it, it is a thing which appertaineth to prouidence, (which the Grækes call Prophalacticæ,) but if anie will abuse the word, it is called Therapeutica. But for as much as of the vlcers themselues, certaine be simple, and certaine be hollow, (if a man will diligentlie marke and consider) the curation of them is brought to passe in eschuing and foresæing those things which bæ hurtfull vnto nature. And when we woulde bring anie thing to good successe, wæ had næde of Natures helpe, as in closing of an Vlcer, and regeneration of flesh, in the which things the chiefest care and regard appertaineth vnto that part of the arte, which is called Prouidence, but it is called vulgarly healing.

And therefore this part of the art that is named Prouidence, is diuided into two kindes. The one is that which doth remoue awaie the disease present, the other which withstandeth the disease, that it maye not come to his fulnesse. Therefore the younger Philitions hære doe not vnderstand, that their disputation and contention consisteth onely in names, wherfore if they were studious in things, they should finde out that there were two differences of the functions and actions of medicine, that is to saie, the disease alreadie come, or to withstand those that are not yet present. Then there is no man but he wil confesse, that to cure or to heale, is no other thing, but to take awaie the disease that is present, whether it be done awaie by the worke of nature or by medicines, but prouidence is a thing that letteth the disease, that hæ may not come, & truelie they which doe cure the ill humours which come to the vlcer, doe minister the art of medicine by reason and methode, in purging and taking awaie those things which doe hinder the course of Nature. And these two manners of curing are properlie called in Græke Prophilactica, (for they let, as it was sayde before,) that the filthie mattier engendereth

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not in the vlcer, neither yet ouer much moisture, which may hinder the curation.

The fourth Chapter.

IT is but in vaine truelie, thus carefullie to striue about the name, but it is more conuenient (in my iudgement) to giue some good method to cure the vlcers, such as I haue spoken of, as wel in the booke going before, as in this. But I doe much mernaile at the dulnesse of Thessalus, writing thus of the curation of vlcers, the which are called Cacoethæ. The communities of vlcers that continue long time, and that are vncurable, or els returne againe after the matter induced, be verie necessarie, in likewise as in vlcers that may not grow together & be closed, it must be considered what is the cause that letteth and procureth the saide growing together, the which cause ought to be taken awaie. But in them that renue ỹ ciccatrise againe, it behoueth to kæp the same ciccatrise, that is to saie, in strength, (for so we haue translated To metasuicrinen) and in comforting the suffering member or all the bodie in common, and in ordering it, that it endure not lightly, by ỹ remedies appropriate therto. And when Thessalus had propounded such wordes in the beginning of his booke of Surgerie, he writeth afterward more plainelie of this matter: The vlcers that endure long and may not be healed, or that renue and come after the ciccatrise, giue such indications, that is to saie, if they come not to ciccatrise, it behoueth you to let the vnion and comming together, & to renue the vlcerate place againe. And after that you haue made it like vnto a fresh wound, it must be healed as a bleeding wound. But if the said cure profit nothing, you ought to mittigate the inflamation, & make as much diligence as you can. But the vlcers that come to a ciccatrise, and open againe in their accessions & exulcerations, you ought to cure them like vnto thē, where there is a fresh inflamation, & afterward you ought to applie vpon the said vlcer a plaister

of mitigatiue thinges, vntill the ire and feareefulnesse be abated: after this is done, you ought to dresse the vlcer, and then make the parts about it ware red, in wrapping it about with a Malagma made of mustard seed, or with some other medicament, that may change the said parts, & make them lesse subiect to diseases. And if they cease not with these things, you ought to haue cure of all ỹ body, in strengthening it with diuerse exercitations, gestings, and vociferations, in commanding thē that kepe him, to such things as these be: That is to saie, in manner of liuing, by diminishing or augmenting, by degrees, in beginning, & vomiting, made by Raphanus. You shall also vse white Elleber, and all other thinges which we vse in diseases that be difficult to take awaie, which are subiect to reason and manner of liuing. This is the saying of Thessalus.

Now it is time to consider the stupiditie of the man, (I saie the stupiditie) if he thinke he hath sayde well, and the bolonesse of him culpable to saie nothing, and by this meanes supposeth to deceiue the Readers. But tell mee Thessalus, what is the Indication curatiue that is taken of an olde Vlcer? Trulie I neuer found out curation of the olde Vlcers, nor of the newe, not by time, in what disease so euer it bee, but of the affect that I purposed to cure. But if we altogether regard time, as if the Indication curatiue were taken of it, the second daie we should giue an other indication than the third, & likewise to giue the fourth daie another, then the fift, and so of the first, & all other daies following.

For by this meanes we shall no more consider the affect of the disease that we goe about to cure, and the Indication no more to bee taken of them, whereby we coulde neuer thinke of a straunger reason: howe then are the communities of vlcers necessarie, that continue a greate while, seeing that the time it selfe can indicate nothing at all. For when an Vlcer is with erosion that commeth of ill humours, we shall not take an Indication of it after foure moneths, but that which we haue taken at the verie beginning.

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And for a truth, that I may not permit such an vlcer to abide so long time, but at the first I will take awaie the cause thereof. But I cannot coniecture what may shewe the time more than the number of daies, except Thessalus will saie, that to haue knowledge of such an vlcer, we must tarrie the time, but in such a case he sheweth himselfe altogether foolish. What is to saie, if he confesse openlie that he knoweth not the first affect, which hath inueterated the vlcer. Furthermore, he must plainlie also confesse the Indication curatiue to be taken of the disease, and the knowledge of the disease to be taken of other things. But be it so, that time serueth somewhat to the disease, neuertheless the Indication curatiue is not taken of time. But to what purpose serueth it, if any Vlcer bee inueterate, to do away ỹ which letteth the coition, & to renue the place which is pained. For thou foolish fellow, if for the maligne flure which the Grækes call Cachoethæ, the lippes be affected in such sort, what shalt thou profit if thou doe cut them, before thou hast prouided to stop the flure? Truelie thou shalt but make the Vlcer wider than it is, as some doe that cure vlcers after the same manner as thou doest. For the cause remaining, which before made the vlcer harde and flintie, thou shalt doe no other thing in cutting awaie the lips, but enlarge the vlcer. For those which thou cuttest shall be made hard, & come again as they were before. Although that prudent Thessalus hath not added this thing, that the partes of the vlcer which are hard, stonie, and discoloured, ought to be cut awaie, but commandeth by an absolute sentence, that those thinges which hinder the closing of the vlcer, ought to be cut awaie and to be renued. But if truelie hee had counsailed to take awaie the causes that hinder the agglutination of the vlcer, and that this reason were auncient and olde, I would not accuse him, for it is commanded almost of all the auncient Phisitions, which doe write of the curation of vlcers, by a certaine reason and Method, that those causes which doe excite the vlcers ought to be cut awaie, euen truelie, as of all other diseases.

For truelie I do thinke it expedient, ỹ the efficient cause

remaining, which exciteth the vlcers, ought first to be taken awaie. In other diseases, it is not expedient, but chiefly there the curation must be taken in hand, where the efficient cause remaineth. And if the sayd Thessalus hath not spoken of the causes that let the conglutination, and hath onelie spoken of the lips (as he hath said afterward) it appereth that he is ignorant of more than he knoweth, of those things which appertaineth to the curation of vlcers. But it is possible that this alone is the cause which hindereth the cure of the vlcer. And it may (as it is aforesaid) be the cause that intemperauncie, which is without a tumour against nature, be in the vlcerate partes, and also that it be ioyned with a tomour, the which doth not require that the lips should be altogether cut awaie. It maye also bee the cause that Varix, which is aboue it, or that the milt which augmenteth it, or some disease in the liuer, and beside this, the weakneese of the affected part be nothing else, but a manifest intemperancie.

And besides this, a vicious humour in the bodie, which the Grækes call Cacochimia, and the chiefest of all the causes which may be to the vlcers an incommoditie. Truelie great abundance of humours, which the Grækes call Plethora, resorting vnto the vlcer, doeth hinder the curation. But if Thessalus be of that opinion, that the lippes onelie must be taken awaie, I saie, that of many things he knoweth but one alone, which is so euident, that the shepheards are not ignorant thereof, for if a shepheard sawe the lips of an vlcer, hard, flintie, wan, blacke, or a leadie coulour, hee would not doubt to cut it awaie.

Then for to cut awaie is an easie thing, but for to cure by medicines is a greater matter, and that requireth a true methode. Neuertheless Thessalus neuer knew howe the lips might be cured by medicines, for all men confesse that he hath swarued from this part of the art, and as he himselfe hath shewed, it seemeth that he had neither experience nor rationall knowledge of medicines, which is a manifest thing by the bookes that he hath made of medicines, before rehearsed. But of this one worke consequent, wee

shall

shall entreate of those things which hée hath not written well.

And now we doe intend with deliberation to speake of the curation of inueterate vlcers, of the which he hath before intreated. Certainlie it had bene better to haue called them Cachoethæ, and not inueterate, & thē to declare their nature, disposition, and cause of their generation, and the curation of either of them.

And first to know the common curation of all vlcers, for as much as they be vlcers, of the which I haue written in the third booke, next after the particular and proper cure of either of them, afterward the kinde of the efficient cause, as I haue spoken of in this present booke. And although Thessalus hath done nothing of all these things, yet he doth thinke that the vlcerate place must be renued, when it is made like vnto a new wound, to cure it as a bloudie vlcer, what is he that is exercised in the workes of the Arte, that vnderstandeth not euidentlie, that such a doctrine hath bene written by him that neuer cured vlcer? Is it possible that a man may cure an inueterate vlcer, as you may cure a bloudie wound, and after he hath made it lyke vnto a fresh wound, shall it be in drawing of the vlcer together by rollers? or ioyning them by stitches? or neither by the one or by the other? but by conuenient medicines? What is he that knoweth not, that an vlcer called Cachoethæ is caued or hollow, seeing that it is made by corrosion? Is it possible (O fole and impudent Thessalus) that a caued vlcer may grow together, and be adglutinated, before the cauitie be filled with flesh? is not that to cure an vlcer as a grēne wound? then hast thou thy selfe written in vaine, that hath taken indication to cure caued vlcers, not with closing, but with the filling of ỹ cauitie. But if euery vlcer called Cachoethæ were not hollowe of it selfe, yet when it is made bloudie in cutting the lips awaie (as thou commaundest) then of necessitie it is made hollow, and requireth great space betwixt the lips: euen in such manner that I cannot se how thou maist make them coniglutinate together as a bloudie wound: for if thou affaie by

force and violence the lippes that are so farre asonder, of necessitie there commeth Phlegmon, which letteth the sayde lyppes to close together. The which thing I suppose, that Thessalus vnderstãdeth not. For he saith after these woords: If the vlcer be not bound, thou must mittigate the inflammation, for it is necessary that they be not bound, but because that the same is giuen of Thessalus, and that we passe ouer so sone without any curious examination, it is euident to euerye one that he followeth not the communitie which he himselfe hath giuen. For if wee take that which letteth, we shall take nothing of the communitie of inueterate vlcers, for as much as they be such. But put wee the case that it be so, and let vs trye what followeth. Thessalus wryteth in this manner:

The vlcer that commeth to a ciccatrice shalbe cured, in the excesse, an vlcer in such a manner shalbe cured as they that haue bene lately greued with inflammation. Then after, he saith, you must cause the redneſſe to come to the parts that ye about it, by a plaister that be called reuelatiue, which is made of mustrad seede. What saist thou madfole? if thy flux be bitter and hot, must the place be made red with mustardseede, euen in such sorte, that all the part shall receiue flux by the same medicine, that is to say, that it be all vlcerate and red? For the olde writers made the parts that were weakened with abundaunce of colde humors, hot againe with warming of them, and making of them red, but thou vsest rubification in all vlcers, yea and that without making of any difference. And thus if the vlcer be not cured either by the weakneſſe of ỹ part, or by the making of the flux greater, thẽ thou turnest to another maner of curing. For after that thou hast inflamed the part with Musterd seede, & hast profited nothing, then thou turnest againe to the curation of all the bodie. Yet as I suppose in my iudgement, all the countries be ordered & established, in such things, as well by reason, as by experience, that they know, that all the body should be first purged of those superfluities, before they doe minister any hot or sharp medicines vnto ỹ greued part. For all those medicines that

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be hot, & ridde vnto them from all partes of the bodie, lyke vnto Methodis or bookes, and if you doe not first purge the bodie, thou shalt leaue matter to flow vnto ỹ weake place, that may be drawen by the sharpe medicine, which thing both the Emperikes and also the Dogmatists confesse, and also the auncient writers haue esteemed it so. For in as much as Thessalus hath made mention of them, it shall bee no straunge thing to alleadge to them as witnesses, that it is not lawfull to cure the eie well, before all the rest of the head, neither the head before the rest of the bodie. Such was the sentence of Aristotle and Plato, in the cure of diseases: likewise of Hyppocrates, Diocles, Praxagoras, and Plistonichus, but Thessalus opinion is not so, but commeth first to the composition of Mustarseed, and then he hath sollicitated and troubled all to bodie, without shewing of anie thing wisely.

For when as it is lawfull first to purge all the bodie, and then forthwith to fede it with wholsome meates, then Thessalus commeth, and vseth for these thinges, vociferations, exercitations, gestings, and chaunge of liuing, by certaine circuites and actes, then he commeth to the vomite made with Raphanus, and for the whole conclusion, he doth minister Eliber. Trulie he himselfe doth promise to heale all diseases, euen after this sort, verie easilie, but I cannot vnderstand how that anie hath bene cured after this maner, either in long space of time, or by vnpossible labour.

Now then like as we haue seene by vse & experience, put we the case that there be one to be cured of a maligne Vlcer called Cachoethæ, put we the case also, that there is an other that is in good health, except a scratch of his arme, or of anie other place, by meanes whereof there is an vlcer or a pustle, then within a little while after there commeth an itch to the partie, and after the pustule is broken, ther commeth a disclosed vlcer, with vnequall fretting, & that such things be come in foure daies.

To this purpose let anie of Thessalus sect answere me in what maner we shuld cure such an vlcer, I cal it altogether

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Cachoethæ, and therefore I will consider what is the disposition and affect of all the whole bodie: For I will first finde out of what kinde of humour this doth come, as well by the Symptomata of the vlcer, as by the signes of the bodie, then forsoth I will purge the said superfluous humor without tarrying anie longer, least the patient get anie disease stubburne or disobedient to be cured. But the sect of Thessalus, that obserue his preceptes, will tarrie vntill the vlcer be olde, because it may returne to the wondrous and meruailous communitie of inueterate vlcers, as if it were not much better to giue the communitie of froward vlcers, I doe not meane those that be veterate, shall make manifest the curation.

Afterward the said Thessalions would doe one of both these, either they woulde cut the vlcer, and make it as it were fresh, and so bring the parts to adglutination, or else they would first vse the Malagma that is made of mustard-seede, and if neither of these profit, they will haue their refuge to the vociferations, gestations, and other exercitations, and also to the manner of liuing that chaungeth by circuities, and after they will moue vomit by Raphanus, and if the vlcer be not cured by such things, then they minister Eliber, and if the Eliber doe nothing profit, they send the patient into Libia for change of aire. Thessalus ought to haue added this word, after this excellent and singular curation of rebellious vlcers.

For of a truth the Thessalians stand in vociferations, gestations, and other like things, as if they should cure the euill habitude of the bodie, (which the Grækes call Cacexia) and not the vice of the humour (that the Græks call Cachochimia.) Is it not meruaile if they confesse that they know not the vlcer Cachoethæ, as sone as it is made, and that they will tarrie till it be olde, and that often they vse siccatrise, and open againe many times ere they vnderstand what they doe, and how they counsaile those that haue the feauers to passe the fit, which shall come the third daie, or not, they trulie haue verie well knowen the contemplation of the crise, and can foresee by it the chiefe increasing of

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the disease. But what chaunceth thereof most often? truely it followeth, that the pacients abide in their beds, and consume through their default, which might haue bene cured the second daye. Of a truth we haue not onely seene this chaunce, once, twise, or thrise, but vi. C. times, and whē the first fit was past, we washed the sicke persons that had the feuer, which thing we haue seene done of our predecessors & maisters. And consequently we haue suffered them to liue without feare in their manner accustomed, as they ỹ should no more haue the feuer, whome wise Thessalus, which inuented the first dyet, that is to say, not to eate in three daies, hath dryed and consumed onely through hunger. Then as I coniecture, he would fede them a little on ỹ fourth day, and so nourish them by little and little, in such wise, that they ỹ had but once the feuer, should skant go about their customable businesse.

Truely he consumed his pacients alway in their diseases, the which truely very easely might haue bene cured. For when an vlcer dyd swell at the beginning, Thessalus did suffer it to runne a yeare and more, and taryed often so long till the said vlcer oftentimes produced cicatrice, when as before it might in fewe daies haue bene cured, and also he would often open it, to see if it were maligne and stubborne to cure. Then after that he began the curation, he purged not forthwith ỹ bodie, but first of all vsed his Malagma of Mustardseede, and then his gestes, vociferations, & certaine manners of liuing, and then his vomit of Raphanus, and last of all Eliber.

What is this I praye you then for to linger a whole yeare? (Now by the liuing God) it were a great madnesse if we should prolong a moneth to know if the vlcer be maligne, and then take in hand the curation, when as the pacient in vi. or vii. daies, at the vttermost, may be cured. But what necessitie was it to speake of the communitie of vlcers inueterate, seeing that nothing may profit the curatiō thereof? Truely it were good leauing the cōmunitie Indicatrice, to write of ỹ curation of vlcers, I doe not meane inueterate, but such as be stuburne and rebellious in cure.

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For sometime it happeneth that vlcers and diseases be cõtumatious and stubburne to cure. How be it Indication curatiue is not taken of this contumacie and rebellion, but it is the disease that geueth the first indication of curing. And of the first indicatiõ, the remedies, as I haue declared, are found out. For the way to cure by methode, is ỹ which we vse, in following the aunciẽt wryters, if so be that methode is a vniuersall way, which is cõmon to all perticular things.

Herein Thessalus truly is beguiled, for he thinketh that all the knowledge of them, which doe any thing by methode, is very methode, which is not so. For it behoueth that he which doth any thing by methode, haue notice and knowledge in the like and vnlike. Neuertheless the knowledge of like and vnlike is not methode: for neither Aristotle, nor yet Plato, affirmeth that which Thessalus dare falsely alleadge. But now it is not conuenient to proue & confute such matters: wherefore I will returne againe to the Methode curatiue, and truely I will shew vnto you the principle of methode in all curations, and also I will declare vnto you how ỹ way in all particular things is like, which leadeth from that principle to the ende. Wherfore, although in all diseases there sæmeth a proper methode of curing, neuertheless there is in all things one cõmon gender, for it behoueth to begin alwayes at the indication of the disease, which we take in hand to cure, & then we must way and consider, if the cause which excited the disease, be alreadie ceased, or augmenteth the same disease. If the sayd cause be eased, then we must come to the methode, whereof we haue here declared: by the which methode thou shalt learne the remedies of an inflammation, and of a Feuer, and also how I will shortly intreate of the curation of all diseases. For if nothing be done, thou shalt not take paine to enquire the precedent causes, but shalt begin onely at the disease. But if any thing be done presently, thou shalt take two indications of curation.

Now I cannot but maruell at the sect of Thessalus, not bicause they misse in such things: but because they vse these names

names, Dispathies, Metasincrisis, imbecillities, firmitudes, & other such names. And if you aske thē what such names meane, they wot not what to aunswere. Also if you aske what that signifieth, which they call in all inueterate vlcers, in Grēeke Metasuncrinem ten texin, they aunswer neither prudently, nor yet with consideration. If so be that it were an auncient name vsurped by any of the grēekes, peraduenture by these things we may vnderstād what things they haue written, and for what intent they haue spoken the same. But because it is a point of their folishnesse, & impudencie, to saye that it is come of the Hipothese of Asclepiades, like as their other decrees, therfore it were a thing most conuenient that they interprete their owne dreames. From whēce there is a notable saying among the Grēekes: Sincrinestai, Ta somata, cai Thiacrinestai, which meaneth thus, mingle and deuide bodies, as though it were lawfull to vsurpe such little bodies, which they call Atones, & pores, passages indiuidable and vacuate, or finally the insensible and inalterable things to be the first elements, euen as they truely doe dayly vsurpe. Furthermore, Thessalus in his canon, when he confirmeth the principles, addeth something beside that, which was written by Themison, & Asclepiades, & as far as he vnderstandeth, he wryteth not obscurely, but he hath not imitated Asclepiades, altogither in Simitry: that is to say, that healthy consisteth in competēt and comoderation of small cundites or passages, and that curation is no other thing, but a returne to the first simitrie, or comoderatiō of the said cundits. But Thessalus supposeth ỳ all the state & cōdition of ỳ said cundits must be changed, & by this opinion doth procede the name of Metasincrisis, which may signifie in effect Metaporopoieseseos in grēeke, ỳ is mutatiō of the state of smal cūdits & pores, but it did not become him to vse ỳ names of dogmatists in place where he cōmaūdeth to eschew the vncertaine & darke names.

Then his disciples aunswereth, ỳ he must not be hard as a dogmatist, whē he vseth this name Aphelos in greke, that is to say simply. For of a truth, some of his disciples are accustomed to defend him in this manner, in renoncing vs to ano-

another name that is Aphelian, which we translate simplenesse, the which name truely I cannot tell what it signifieth. For if he send vs againe to another name more foolish, which the Grekes call Vioticos, the which as they expound doth signifie likewise so vnto the common people: truely it were as good to say, Aphelos not exactly or well, but without Arte or knowledge, for they which be of speeche most lightest, vse names of artes, vnder some sense, that hath no foundation, & when they are demaunded what they meane, they know not. The which thing those Thessalians cõfesse to be their manner and custome, when we doe obiect any thing against them. And for a truth, they will also confesse, that they vnderstand not perfectly, what Metacincrisis is, if it be spoken of the mutation of the smal cundits, which the Grekes call Poropoia, in deede it should haue some vnderstanding, but yet many wayes friuolous and foolish. For our bodies doe not consist of little bodies called Atomes, and of little passages, or pores: but if this were true, it should not be possible to shewe in what maner, mustard might change or alter the state of the same pores, & if any of them should shew the truth, yet we would not agree vnto their sect, because they promisse ỳ they wil be content with their apparent communities: therefore lette them not vse these names, neither let them hinder vs no more in our matters. For it is lawfull without the name Metasincrisis, to say in other wordes the curation of inueterate vlcers, as the Emperickes doe.

Also we haue declared in ỳ second booke, how they talke of this word Atonias, that is to say, imbecilitie, & yet know not what it meaneth. For if they vse this name as the Emperickes do, then it should signifie nothing else but that the actions are not kept: for if they say that certaine faculties, doe gouerne liuing creatures, which we & all the auncient writers doe affirme, but yet notwithstãding they repugne against the precepts of Asclepiades, & also they propound vncertaine things, to the which the authors doe not agree: they touch the truth a little, yet they commaund to eschew it.

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But tell me true Theſſalus, what meaneth this woꝛde Metaſincriſis? if thou ſaie that it betokeneth to change the poꝛes, thou art deceiued, and ſuppoſeſt vncertaine thinges. But if thou ſaiſt that it is a great matter to cure the particle grieued of the bodie, as the man, thou ſaiſt no moꝛe thã the Emperikes, except the name. Foꝛ they doe knowe that men are made whole by medicines, but they know not the cauſe oꝛ reaſon, by what meanes the remedies reſtoꝛeth health. Foꝛ none of the Emperikes can tell, if the faculties of the medicaments chaungeth the poꝛes, oꝛ if it maketh a Simitrie, oꝛ if it altereth the qualitie of the Patients particle that is grieued. Howbeit the Emperikes are diſcrete men, if they ſaie that they know onelie one thing, that is to ſaie, if they haue noted and obſerued the times, how vtilitie hath followed, when the medicament of muſtard hath ben miniſtred to ſuch vlcers, and in what time. Neuertheleſſe they ſpeake not of method, neither yet repugne againſt it, neither be diſpleaſed with the notiſe thereof, noꝛ diſpꝛaiſe the ancient wꝛiters, neither Hyppocrates, but rather pꝛaiſe him, and affirme that he hath ſaid all thinges well. But Theſſalus doth not onlie deſpiſe Hyppocrates, but all ẏ other auncient Phiſitions, neither doth he vnderſtand ẏ he hath wꝛitten all the pꝛecepts of rebellious vlcers, without reaſon, emperiklie. Foꝛ if he had wꝛitten them well, then it ſhould haue bene counted a woꝛke moſt pꝛofitable. But it appeareth not ẏ he hath done ſo, ſeeing that he peruerteth ẏ right oꝛder of remedies, and vſeth his remedies to the grieued part, befoꝛe he hath pꝛepared the bodie. Foꝛ this is an argument of great ignoꝛance, ſeeing ẏ almoſt it is a pꝛinciple in Chirurgerie, that all the bodie muſt be purged of the euill excrementes, befoꝛe anie ſtrong medicine be applyed vnto the affected parte. Foꝛ who is he ẏ will iudge either by reaſon oꝛ experience, foꝛ there is no other third thing to iudge by, in what art ſo euer it be, noꝛ in anie part of life, he ſhal finde ẏ it is agreeable to reaſon, foꝛ a man to miniſter ſtrong & hot medicines to anie particle of the bodie, beforꝛe he hath purged the bodie of all anoiance, & pꝛepared ẏ ſame to health: foꝛ the ſaid medicine dꝛaweth the excrements and

superfluities from all the bodie, like as boring or Ventosis doth, & it doth so fasten to the affected part, that it may be scarcelie remoued. Therefore it must be asked of these Thessalions, frō whence this opinion cōmeth to Thessalus, to write fables as cōcerning ỳ curatiō of rebellious vlcers, seeing that none of the Emperiks, nor yet Rationals, haue written so before this time. For neither Thessalus himselfe, neither anie other of his sect, dare affirme, that the order of such remedies, either doth agrée with experience or reason. For neither can they giue Indication of time, neither yet of the affect of the disease. Yet for all that, Thessalus is not all together ignorant, because he iudgeth, that the cause ỳ hindereth the ciccatrise must be considered and taken awaie, & because also that he iudgeth, that this must be done not onelie in vlcers, but also in all other diseases, (as the ancient writers do admonish.) But they answere nothing to the purpose, for they saie alwaies, that we do not vnderstand them, as if they knew perfectly the thought of Hyppocrates, and of all the ancients. And they affirme ỳ Thessalus hath a good opinion, when he saith, that there is a communitie of inueterate vlcers, & that Hyppocrates vnderstood it so, in his booke of Vlcers, which writeth in this maner. It is profitable that the bloud doe flowe continually from the inueterate vlcer, when so euer it séemeth néedfull. It were not farre from my purpose, if I should speak of the iudgement and opinion of Hyppocrates, though I haue not promised ỳ I would so do in this place. But that which I will saie, shall be of the interpretation of the wit & knowledge of the auncient Phisitions, the which truelie as yet haue giuen no sect, but studying with simple & pure minde, to inuent some thing profitable to mans health. It is well perceiued therfore, that they haue found some thing by reason, and some thing by vse and experience. Then dyd they write their inuentions, many times without giuing reason thereto, and sometime they did, and if they did giue anie reason it was to profit the readers. For if they intended to be profitable to their successors, and when as they knew reason of inuēting things, then diligentlie they set it forth,

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and where they thought it obscure, they thought it superfluous to rehearse, and therefore let it passe. Now it is well knowen vnto all men, though I hold my peace, that the ancients haue loued no verbositie. For that cause afore recited, not only Hippocrates, but also all ỹ other ancient Phisitions, sometime not making mention of the middlemost, speaketh of the third thing. For if the first be a signe of the second, the third of necessitie must followe after the second.

And thus oftentimes omitting the first and second, they spake of the third. I haue oftentimes declared how the ancients, and chiefly Hyppocrates, haue written after this manner, But he that will know and perfectly vnderstand the maner of curing, ought to be exercised in their stile and manner of interpreting. For this I will intreate of ỹ which I haue purposed.

The fift Chapter.

FOr those Vlcers, which (after medicines to them ministred) be not cured, those the Phisitions cal in Greeke Cachoethæ, but we cal them maligne and rebellious to cure. But we haue spoken in the booke aforesaid, what the curation of vlcers is. Therefore in these kindes of vlcers that be maligne, we may vse these names indifferently, that is to saie, we call them Cachoethæ, inueterate, or Diuturnus. In like manner the affect of the disease called Cachoethæ, that is to saie, stubburne and rebellious to be cured, that maketh some thing for our purpose to know, neuertheless the saide diuturnitie of the saide vlcers, because they come againe, or be of long continuance, & ware olde, haue no conuenient indication of curing, but that must bee considered, because the vlcerate part is ill affected, that ill affect being once knowen, the cure is manifest.

But thou wilt aske, how can this be done? trulie if thou wilt heale the vlcerate part affected, thou must first take awaie the abundance and corrupt vicious humors from all

the bodie: for in cleansing awaie the same, the diuturnitie is taken awaie, but the finding out, which is profitable to vs, commeth not first of the diuturnitie, but of the ill disposition & malignitie of the humour, by meanes whereof these three things following, must chiefly be considered, that is, the signe, the affect, and curation. The signe is the diuturnitie or continuance of the vlcer, the affect, is the vicious humours repairing to the vlcer, and the curation is the taking awaie of the saide humours. By this meanes you shall finde that the auncient Philitions manie times after the first, made mention of the third, leauing the middlemost, as Hyppocrates did, whē he said, it is vtill to cause the bloud to flowe out often of inueterate vlcers. But it is inutill, that the indication curatiue should be taken of the diuturnitie of the vlcer, but of the ill disposition of the bloud. For a little after he saith thus: the vice and euill bloud hindereth greatlie the cure of the said vlcers. Also putrefaction of the bloud, & all things that commeth by transmutation of the bloud, letteth also the curation of the sayd vlcers. And afterward he speaketh of vlcers that come not to a cicatrise: The vlcers trulie (saith he) may not be closed together, if the lips and partes that are rounde about, be swart or blacke, with rotten bloud or Varises that causeth the flure, if you cure not the sayd partes that bee about it, they will not come together. And afterward hee writeth of the cure of Varises, and then maketh mention of the purging of all the bodie, as well in woundes as in Vlcers, where feare of daunger or putrefaction, in Greeke called Sphaselos, doth remaine, and besides in Vlcers called Herpes and Esthioninus, that is to saie, which doe erode and eate the skinne. And thus Hyppocrates is wont to call those vlcers, after this sorte, wherein anie ill humour doth cause erosin. And thus when he speaketh of them that ensueth, he saith in such wordes: In euerie Vlcer whereas chanceth Erisipelas, all the bodie must be purged. And finallie, if you reade diligentlie the booke of vlcers, you shall finde that he taketh Indication alwaies of ỹ affect of the disease, & if he haue anie consideration of time,

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it is onelie to knowe the affect. And that it is so, you may know it in the beginning of the said booke, which concludeth thus: You may not minister anie moist thing to Vlcers, what vlcers so euer they be, but wine. Then sheweth hee the cause, (and saith,) Drie vlcers are nèrest to health, and moist the contrarie, then after he saith, it is an vlcer for that it is moist, but if it be dry, it is whole. Therfore in all his cure, in as much as he hath constituted the end of al the cure of vlcers to be drinesse, it ought to be considered. Then he findeth out the particular thinges, admonishing vs manie times of the same end, writing in this manner: Euerie wound that is diuided with a cutting Instrument, receiueth medicines in the beginning that ought to be applied to rawe and bloudie wounds, the which Medicamentes in Grœke is called Enaimon, which is, drying, and letteth the wound to come to suppuration, for it is more drier by the reason of the bloud which floweth out of it. And agayne Hyppocrates sayth, All vlcers that are well purged, they come sooner to dryneſſe and cicatrize, but if anie superfluous flesh do grow, it is by the reason of some contusion. And againe he saith, if that anie of the wound cannot consode together, the moistneſſe is the cause thereof. In all these sayings, Hyppocrates admonisheth vs of the first Indication curatiue of all Vlcers: for of a truth, the curation of an Vlcer, for as much as it is an vlcer, is moderate dryneſſe, whereof the demonstration hath bene giuen in the booke going before.

For the curation of an vlcer that is coniunct with another affect, whereof the cure ought to procède, is not like to a simple vlcer, for the first curation of such a one as is coniunct with anie other affect, shall begin first of the same affect, and then at the vlcer. For if there be either Phlegmon or swart coulour, or Ecchymosis, or Erysipilas, or Oedema, in the vlcerate part, first you must begin the curation, at one of the sayde affectes. Neuertheleſſe all men knowe well, that sometimes these Vlcers are not well cured, but are made greater, for that the partes round about the Vlcer, is affected either with Phlegmon, either by bruſing,

either with some other tumour, which should haue ben first taken awaie, before you had proceeded to the cure of the vlcer. And for a certaintie, it is not possible to heale the vlcer, if the place where these be, be not first cured. And therefore Hyppocrates putteth vs in memorie of those things which he hath spoken of in the beginning of his booke, and also of those things before especified, and of those that be present he writeth thus.

Euerie wound that is diuided with a cutting Instrument or sharpe pointed, receiueth Medicament called Enæmon, and also a medicament desiccatiue, that may let the filthie mattier. But if the flesh be contused or cut with a blunt weapon, remedie must be giuen in such wise, that it come sone to suppuratiõ. For in so doing, it shal be the lesse molested and grieued with Phlegmon. And also it is necessarie that the putrified flesh, which hath bene contused & incised, come first to suppuration, and afterward new flesh to be engendered. By these wordes Hyppocrates sheweth manifestlie, that all the affects of the vlcerate partes ought to be desiccated, except those where Pus will sodainelye breede. And so he going forward, saith, that Pus commeth through some putrefaction. Furthermore, that all putrefaction commeth through moistures and heate, and therefore the Cataplasmes made of Barlie meale (seeing that they are hot and moist) we will minister it to all diseases, where it is expedient to engender Pus, for the Barlie meale with water and oyle, and likewise bread with oyle, or a fomentation of much hot water, or ỹ Malagma, called Tetrapharmice, and to conclude, all things that moist and heat, ingender Pus. And if in the parts where Phlegmon is, there arise some pulsation, in such wise, that there is no hope of the curation of the said parts, without Pus or suppuration, all the auncients trulie applie the said medicines, and not before. The which thinges Hyppocrates sheweth plainely in the wordes before rehearsed, whereby he commaundeth to vse drie medicines to the wounded parts, where there is contusion, but they that be with contusion, must be quicklie brought to suppuration.

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Moreouer, when he saith, that all vlcers which be not well mundified, & begin againe to increase, in them there groweth supercrescent flesh, but those that are mundified as they ought to be, cõmeth soone to riccatrize, for in thẽ there groweth no superfluous flesh, except there be contusion. Of a truth, when he speaketh of contusion, he calleth to mind that which he hath said before. That is, all vlcers require drie medicines, except those be contused. For if you doe applie to the parts where as Phlegmon is, a Cataplasma that is hot and moist, it is not done by the first and principall reason, ẏ is as a remedie to the affected part, but to mittigate the accidents. For the remedies of Phlegmon are of desiccatiue vertue. Hearken now what Hyppocrates saith: the Cataplasmes for Oedema and Phlegmon, ought to be made of Verbescum sodden, the leaues of Trifolium, & the leaues of Piretron and Polium sodden. All these medicaments haue vertue desiccatiue, as we haue made mention in the booke of simple Medicaments.

And to be short, the curation of the parts where Phlegmon is, is done by kinde of these remedies, which doth remoue altogether the affects. And if the said remedies haue left anie thing remaining that will come to suppuration, it is needfull then to haue another medicine which is more strong, to make it sooner to come to suppuration, or if ẏ skin that be about be thin, and that thou wilt that the Patient shall be sooner eased, you must make incision. The taking awaie of Phlegmon, is by mittigation of Barlie meale, & not curation, for that fighteth onelie against the disease, but of these differences we will speake hereafter at large.

Now I thinke we haue manifestlie shewed, how that Hyppocrates hath commaunded that all vlcers shall be desiccated, and that he hath confirmed it to be the proper end of curation. But now in as much as the indication is taken of the affect, and not of time. If anie desire to haue greater persuasion, let him diligentlie reade all the Bookes of Hyppocrates, that he hath written of Vlcers; for he shall perfectlie vnderstande, that there is one Indication generall of all Vlcers, which we

haue shewed in the booke precedent, and there is no Indication to be taken of time, but of the affectes of the vlcers, as Phlegmon, and other such like accidences, as before is especified. And seeing now we are come to the place to speake, it is a thing most true, that Hyppocrates hath bene the inuenter, not onelie of that which we haue said before, but also of all other things that are to be knowen, to him that wil cure an vlcer well. It appeareth trulie that he hath inuented the reason and the manner to cure simple vlcers, and also the kindes of the affects which consist in drinesse. For either the ill humours resort vnto the grieued part, or els they resort no more vnto it. If they come no more, then it is requisite to helpe and succour the grieued parte, that is, if it be pale, blacke, or red, it must be scarified, that the euil bloud may come forth, then afterward because that I may vse his wordes, you must laie thereon a Spunge more dry than moist. For I doe thinke, that there is no person so ignorant, but will thinke ý a drie spunge ought rather to be applyed than a moist, and also to vse deliccatiue medicines. And then if it be requisite for to drawe bloud againe, doe as you haue done before, vntill the time that health be altogether recouered. And if the lips of the vlcer appeare hard and stonie, they must be cut awaie, the which thing is spoken heere.

But if the vlcer that is round, be somewhat hollow, you must cut it according to the roundnesse which is swollen, which swelling the Greekes call Apostema, either all the roundnesse, or as much as necessitie requireth, according to the length of the member. Also it is written of all Tumors against nature, that are ioyned with an vlcer, howe they ought to be cured. Likewise of the Vaines, for they be the occasion that the vlcers be so stubburne, and hard to be cured, if that anie humour of the said Vaines do repaire vnto the vlcer. And in like manner when the flure of an humor commeth from all the bodie, he commandeth that all the bodie shalbe purged, without taking anie indication of time. Trulie it were a ridiculous thing that so many and contrarie Indications should be taken of one communitie. For

put

put we the case, indications to be taken of tyme. But if we graunt that time giueth a certaine indication, it is necessary to aske what indication it giueth, and comprise it in a summe, as Thessalians doth, which taketh indication of a bodie that is bound, that that may bee vnlosed againe, and that bodie that hath a lax, is to bee stopped. Likewise in vlcers that are filthie, mundification is to be required; and those that be holow, to be filled with flesh, and those that be equall to be ciccatrized, & that which hath superfluous flesh, to be taken away. Thessalus himselfe is author of these: but now let him shew that ther is any indication proportioned to the time of the vlcer, as there is in all these that we haue rehearsed, which is not possible for him: for he biddeth that they should be cut, and a Malagma, made of Mustardseede to be applied vnto it.

I praye you what reasonable indication hath he taken now of time, which taketh and vsurpeth this vaine word Metasyncrisis, and after that he prouoketh vomit by Raphanus, and then when he findeth no other remedie, he vseth Ebher, and when these nothing profit, he sendeth the pacient lyke a wyse Phisition into Libia, for chaunge of ayre, the which things shal be more plainly spoken of hereafter, whē we shall shew that indication in what disease so euer it be, shall be taken of time. Yet for all ỳ it shall be good to know the diuturnitie of the disease.

The sixt Chapter.

BVt I will returne to Hyppocrates, whome I doe greatly maruail at, not onely for his diligence, but also for al other things, & chiefly for that he hath not forgotten that which is to be considered of all Phisitions as touching the indications of all diseases. That is to say, the indicatiō which is taken of the greatnesse and magnitude of the affect, which not onely the Methodicians haue permitted (this is to be maruailed at) but also many of the Rationales, yea, and of the Empirickes, although it

be after another sort. For when they say that they haue cõsidered the euacuation in the course of the bloud, they confesse then manifestly, that they haue no regarde of other things that appeare in the affected part, for to come to such euacuation. But I doe not say thus, that purgation is euacuation, the which is no indication of the course of ỹ bloud, but for because wee must sometime haue consideration to the letting forth of bloud, although there be no course of bloud present, which may flow to ỹ greued part: for when the disease is very strong, there is none which vnderstandeth the arte of medicine, but will let bloud. And truely the Emperickes themselues, let bloud when any is fallen from an high place, or when there is any part sore bruised & hurt with any wound, though the patient were whole and sound before, and without superfluitie of bloud. By the which it appeareth, that it is not the flowing of the bloud to the affected parte, which giueth indication, but the magnitude and vehemẽcie of the disease & the force of ỹ strẽgthes, excepting yet from our talke, children. As for example. If a man be whole and sound, and without any maner of hurt, and hauing abundance of bloud, it is not necessarie because of his abundance to take his bloud from him. For there is no indication to be taken of the bloud, for because the man is whole, for to such men fasting doth profit, & small eating, and sometime Purgation or bathing and Frications may suffise. Letting of bloud is not necessary to such, as ỹ Emperickes say.

Likewise Purgation is not good in the onely abundãce of humours, for euen as letting of bloud is done either for abundance of bloud or for the magnitude of the disease, so is purgation giuen either for the abundaunce of ill humours or for the force of the disease. As touching letting of bloud we haue spoken of in another booke, and shall doe againe hereafter. But in this present booke I will speake of purgatiõs, for they that be diseased, require them, not onely because it doth euacuate the noysome and superfluous humours with the which the bodie is grieued, but also putteth forth and cleanseth the excrements within the bodie.

And

And for this cause Hyppocates as well in his other workes as in that he hath written of Vlcers, considereth the vehemencie and strength of the disease, whereof he taketh Iudication of purging, and sayth thus.

Purgations of the bellie is profitable to many Vlcers, and also to woundes of the head, of the bellie, and of the ioynts, and where there is daunger of the rottennesse of the bones, or where stitching behoueth in woundes, or where erosions bee, or where Herpis & other affects be, which hindereth the curation of Vlcers, and also where rolling must be vsed.

By these words it is apparant truelie, that Purgations are profitable both to wounds and Vlcers, at all times when they be great and grieuous. For not onelie the sayd affects, but other bee made great and grieuous, three manner of waies, that is, either through the excellencie of the afflicted part, either else through the greatnesse of the affect, or else because the said affects are Cacoethæ (that is to saie, hard to be cured.)

Hyppocrates hath made mention of all these thinges perticularlie, when he dyd intreate of woundes of the head and bellie, and of the excellencie and dignitie of hurt parts. I thinke it is manifest to all men, that he must bee vnderstode, not onelie the lower bellie, but also the superiour, for in diuiding the Trunke of mannes bodie, which is betwixt the necke and the legges, is two greate capacities.

The first is contained vnder the Thorax, and aboue Diaphragma, and the second vnder Diaphragma, vnto Os Pubi, or to Peritoneum, which couereth the inwarde parte of the bellie. And for certaine, those woundes which hath pearced within the Thorax or within Peritoneum, is verie dangerous, chiefelie if ante of the inward parts bee wounded. Likewise there are verie fewe, but they doe know that the woundes of the ioyntes are Cacoethæ, and are harde to bee cured: Which thinges the Empertikes vnderstand onelie by experience, and they that haue studied, and haue attained to the knowledge of mannes bodie, vnderstand

vnderstand these thinges by the nature of the hurt parte. For in tendonie and sinnowie parts, where bones are void of flesh, there is great daunger of paine, waking, and priuation of rest, and also of conuulsion. Such woundes as these be, and such as be stitched, that is to saie, those that are so great that they need stitching, or at the lest, of binding or rolling, requireth purgation.

We haue declared in the last booke, that all the greater woundes ought to be ioyned together, either by stitching or by binding. Likewise the vlcers where there is daunger of corruptiõ of the bones, are oftentimes ioyned with great inflamations. Also they that procéede of ill humours, bée Cachoethæ, and with erosion. Also Herpetes come of cholerike humours, and all other olde vlcers come of such like cause. Wherefore in all the vlcers before espec fied, Hyppocrates commandeth to purge by the bellie, and afterward he addeth these wordes. In all vlcers whereto Erisipelas is come, the bodie must be purged in that part most profitable for the vlcer, so that the purgation be made either by the vpper partes or else by the lower, which difference hée hath set forth in the booke of Humours, where he commandeth to tourne awaie the humour to the contrarie parte. As for example. There is a great flux that commeth to one part of the bodie where there is an vlcer, it behoueth to make another in the contrarie parts, and thereof he speaketh in the said booke.

Wherefore if there be as yet a great flure which doth runne to the fore part, we shall make reuulsion to the contrarie part: that is to saie, if the vlcer be in the vpper parts, by purging downward, and if it be in the neather partes, by purging the vpper ventricle. But if the flure bée nowe stopped in such sorte that is fixed in the member, it is expedient to driue it out by the next partes, séeing that the passages be the next places, séeing that the accesse and attraction of purging medicines is more easie and prompt, to remoue those thinges that be nére, rather than those thinges that be farre of, the which reason belongeth to another part of the art, which entreateth of purging medicines, therfore

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hereafter it shall be declared and made perfect.

Now I will shew the force, or if you will call it the magnitude of the disease, to be appointed for a certaine indication of taking away bloud or giuing purgation. And also that Hippocrates, was the first inuenter of the sayd indication, I will speake in the bookes following of diseases, and in this booke I will speake of vlcers. I haue alreadie spoken of Purgations. For seeing that euery disease is greuous three maner of wayes, it is either for the excellencie and noblenesse of the part, or for the magnitude of ỹ affect, or for the frowardnesse of the same affect, called in Greeke Cacoethia. Hippocrates hath made mencion of all these things where he speaketh of Purgations. But some perchaunce will say, How then doth not Hippocrates, councell vs to take away the bloud for these causes aboue especified? By my iudgement he commaundeth them thus, but in few wordes, and that not without demonstration, as he and all the auncients were accustomed to doe. Thou shalt vnderstand that it is so, if that thou wilt reade againe his words, that are these. In euery fresh wound, except it be in the belly, it is expedient to let bloud flow out of it, more or lesse. For by that meanes the wound shall be lesse grieuous, the inflamation lesse, and all the places about it. But if thou shalt remember hereafter those wordes that he writ when he did entreate of vlcers and also those thinges that he hath propounded in all his other bookes, that is to say, how that a Phisition ought to be an imitator and follower, not onely of nature, but also of those things which shalbe profitable, when they come to their naturall state. Then thou shalt plainly vnderstād the minde of Hippocrates, and also how that bloud ought to be drawen when wounds be great: but if out of such wounds bloud doth not flow, especially when as it is a thing most conuenient, then thou must adde and supply those thinges that be nedefull and necessarie. The matter that followeth, he conioyneth it with that which is aboue sayde.

Also it is profitable that from inueterate vlcers, bloud doe flow, and also from the parts which are about them.

But

But forasmuch as he hath said before, that bloud should flow from euery grene wound, except that he made mention now of inueterate vlcers, it would seeme to some that he dyd entreate onely of grene and fresh wounds. Therefore he did well adde this, (that is to say) how that it is a thing most mete to draw bloud from inueterate vlcers. Wherefore now seeing that the doctrine which we haue taken of him is true and firme: that is to say, how a flux beginning at the contrary parts, ought to be drawen, & how that which is already fired in the partie, ought to be purged, either from the payned part, or from the part next vnto it: therefore it is now easie for vs to conclude of the detraction of bloud, how that in the beginning it ought to be done in the part farre of, and then in the vlcerate parts.

Furthermore, if you doe adde vnto these which I haue before spoken, how that Hippocrates, cõsulteth to euacuate the superfluous humour, and that detraction of bloud ought to be vsed when it surmounteth, and that a medicament ought to be giuen, which hath vertue to purge humours Chollerike, Melancholicke, and Phlegmatike: Yet haue in remembraunce all these wordes, how that none of them is the curation of vlcers, no not so much as of an vlcer, but rather of Cacochimia, that is coniunct with the vlcer, or of Plethor, or of Phlegmon, or of Herpis, or other like dispositions: Neither yet be not forgetfull of this thing, that is to say, that none of the accidents of the vlcer giueth such proper indication, as magnitude. In the booke precedent, we haue intreated of vlcers, wherein we haue declared all the differences of vlcers, how many, and what they be, & what is the indication of either of thē. Howbeit, I haue not spoken in the saide booke, how the indication of purging is taken of the vehemencie of the disease, because it should not be to much prolixitie & demonstration. Neither in the saide booke, I haue connired the curation of all the bodie with the vlcers, but yet I haue declared in this present booke, in as much as it was agreeable and vtill for my purpose.

The

The seauenth Chapter.

BVt the firme and perfect demonstration of this kinde of Indication, which is taken of the vehemencie of the disease, shal be shewed hereafter. In like maner, the indication which is take of ỹ age, & that which is take of purging humours. Likewise the Indication which is taken of the afflicted parts, shal be declared in the bookes which follow. But as yet we haue onlie made mention of the curatiue Indication that may be taken of the nature of the said parts, that is to saie, of temperance & substance. But trulie we haue nothing touched the Indication, which is taken of the scituation & figure of the partes. Therefore we will speake of the indications that be profitable for the curation of Vlcers. The part trulie that hath sharpe and quicke senses, ought as much as is possible to be cured without dolour or paine. But the Anodinon of such remedies is spoken of in the Booke which entreateth of the simple medicaments.

But he that hath but small senses, and those that be not quicke, may (if the disease require) suffer strong medicines. But we must haue regard and consideration to the strength of the principall member, whereof we will more copiouslie hereafter declare, when as we shall haue occasion to speake of Phlegmon. But if it be not a principall member, surelie without daunger you may minister vnto it such medicines as mittigate and asswage, the Greeks call them Calasticke, whereof we will plainlie and more at large declare hereafter. At this present we will declare the indication which is taken of the scituation and figure of the partes, and then we wil finish and conclude this fourth booke. For this cause haue we excogitated and inuented certaine medicines that must be giuen to him that hath his ventricle vlcerate, the which medicines must be dronken at once, but to him that hath his throate vlcerate, they must be ministered

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at sundry times by little and little, because of the passing which bringeth great vtilitie to the vlcer, neither they must be ministred so, & in such case, as to him that hath his ventricle vlcerate.

Likewise we haue declared by the situation and figure of the said part, that such medicines ought to be made grosser and thick, & more clammy than the other, because that the throte is a passage of things that is eaten and dronken. And for that cause remedies which may conioyne & cleaue on euerie side of it, is most conuenient, and not such as are thinne and easie to slide away. For the thicke are alwaies about the parts, and the clammy doe cleaue vnto it. Likewise vlcers that are in the thick intestines, haue more nede of medicines which are cast out by the fundament, in as much as they be next vnto it. But the vlcers that are in the thin intestines, because they be fardest from the fundament, require both medicines, that is to say, those that are receued by the mouth, and those that are cast in by the fundament. Now truly the cõmon indication of all the interior parts is, that we ought to chose things that be most familiar to the nature of man, be they meates or medicaments, and to eschew those things which be contrarie vnto it. Although to Vlcers which bee in the outwarde partes, the vse of such medicaments be not hurtfull, as Aerugo, æs Vstum, æris Squãma, Cadmia, Pomphilix, Litarge & Ceruſſa. Yet they ought not to be ministred to the vlcers of the inward parts, of whose nature we haue written in the booke of temperaments, and in the booke of simple medicines. But if we go about to glutinate the vlcer, and bring it to a ciccatrise, we must chose glutinatiue medicines, & such as will not cause erosion. But if we will clense the vlcer, we must vse things abstersiue, and such as wil absterge it moderately, as raw Honey, which of al things for this purpose is the chiefest.

But as touching adstingent potions called Austeræ, and other such like alimentes, they be knowen vnto all men. This word Auster, is called Stiphos in Græke, that is to say, little astringent, and that which is lower or bitter, is

called

called in Greke Sarphon. But the medicines which may be taken without danger, are spoken of in the bokes of Medicaments. Neuerthelesse I wil shew some sorme of wholsome Medicaments for the inward vlcers, which are these, namelie, Hipocystis, Balaustium, Cytini Punicorum, Galla, Malicorium, Terra Samia, Lemnium Sigillum, Rosarum Succus, Acacia, & other of like kinde, which be profitable for inward vlcers, and you must minister the said medicaments with some decoction of adstringent things, as of Quinces, Lentisk, or the tops of Rubus, or of Vines, or grene mirtills, or with adstringent Wine. It is now manifest, and I thinke none is so ignorant, but will iudge that hee must eschue drinking of wine if there be Phlegmon, or else there is no daunger.

In like maner it is euident that the said Medicaments must be prepared & receiued with decoction of moist things. Also you must mixe gumme Tragacanthen in those medicines which are for the vlcers in Vula, you must vse Gargarises in the Vlcers that are in the partes called Fauces and Paristhmia, but if the vlcer bee in Aspera Arteria, called Trachia, then the Patient must be layed vpright, and keepe the medicine long time in his mouth, in losing all the muscles that be in that place, for in so doing some part of medicament will flow by little and little to the grieued parte. For when the sayde Aspera Arteria is in his naturall state, or in good health, then we may easilie know when anie potion passeth through it. For like as we must take heede when as it is in good health, least anie flure fall that waie which maye hurt it: so in like manner we must beware when it is grieued, least anie thing doe fall that waie which may prouoke the cough: then it seemeth that the Indications of it are taken of the situation and forme of the part.

Also Honie must be mingled in all Medicaments which are ordained for the Vlcer in the Thorax and Lungs. Therefore if we vse adstringent medicines, they will remaine in the bellie. Then the instrument which is profitable for the digestion and distribution of the said medicamẽts

ouer all the bodie shal be vnite. Also it being mingled with the said medicines, shall be occasion of their quicke passage ouer the bodie, neither shall it anie thing anote or hurt the vlcer. In like manner if there be an vlcer in the bladder or in the raines, honie and such as prouoketh vrine must be mingled with the said medicines. But I thinke that it is apparant to all men, though they take not me the author of the same, how that the vlcerate partes may be discerned or knowen by their substance, action, vtilitie, scituation, and figure. The which things trulie haue ben amplie declared in the booke which entreateth of the signes of the affected parts, but now there is no time to talke of them, therefore I will returne to the method of curation. Also I saie and affirme, that not onelie these aboue rehearsed, but also many other, be the indications of the figure, and scituation of the partes. For you cannot well and exactlie binde the affected part, before ye take indication either of the figure, or scituation, or of them both. Neither can you set the pipe of a clister well, before ye take such Indication. What should I make mention of Argala, speciallie when as you cannot minister it before you perfectlie knowe the scituation and figure of the bladder. Then trulie by these things it doth manifestlie appeare, that the affected part giueth indication to the curation. But in ruptures truelie, which the Grecians call Regmata, many Indications may be taken to one purpose, and principallie the indication that is taken of the scituation ought to be considered. For the ruptions that be hid in the deapth of the bodie, require other curations than the woundes which appeare outwardlie, and for because they be such as be with Ecchimosis, or contusion about the broken flesh, therefore they declare diuerse Indications curatiue. For alwaies the Indications curatiue do answere to the number of the affects, whereof we wil shew more copiouslie hereafter, when we shall speake of Phlegmon, how that the affects that are in the deepe places of the bodie, requireth stronger medicines than those in the vpper parts. Then at the leaſt I iudge it to be manifest, that it is necessarie that the strength of the medicamentes

that

that are ministred outwardlie ought to be resolued, when the affected part which should be cured by those, is hid in ȳ deapth and profunditie of the bodie. Therefore it behoueth to augment the vertue of the same medicaments, so that by the passage thereof it may be slaked. Certainlie Ecchimosis doth indicate euacuation for the remedie of the cure. Wherefore medicamentes that will moderatlie heate and drie, be most conuenient for it. For they that do vehementlie drie, trulie do resolue and digest more at the beginning than they which drie but simplie. But I will speake hereafter somewhat of this disease, which is difficill and serious to cure. But of that which did pertaine to the matter we haue largelie spoken of. Truelie those medicamentes that moisteth and heateth more than they, which the Greekes call Calasticke. Also those which doe somewhat to drinesse, which the Greekes call Suntatica, be the chiefe and principall remedies for all Ecchimosis. But we must take heede the medicines do cleaue to the ruptions that are in the deepnesse of the bodie, and also that they be of strong vertue, & that they be sharpe and such as will digest: and to speake briefliе, such medicines ought to be of great force, inasmuch as Ecchimosis is in the deepnesse of the bodie and far from the skin. In such affects the vse of a cucurbite is profitable, which is an instrument inuented of Phisitions, to cause ulcerate attraction. And when Ecchimosis is digested by the vse of a cucurbit, then you may minister those things which may drie the broken flesh, and conioyne it with ligature, & adde that which may coagulate and ioyne the wounde together, for Ecchimosis being resolued and digested, the broken flesh shall coagulate together. But if it be resolued, then corruption breedeth in it, and occupieth the space that is betweene the lippes of the wounde, so that the ruption cannot close. Wherefore these aboue rehearsed, declare vnto vs all causes howe small so euer they bee.

For although some hath had rigour, or though the bodie hath beene ouerthrowen by some Feauer, so that there hath not bene good concoction, or that it hath beene

defatigated and wearied, then immediatlie there shall bée paine in the part where the ruption and wound is, because that the said ruption hath bene latelie ioyned together, but not so substantiallie, because of time. Wherfore it followeth that a little thing may easilie part them, & fil the place againe with superfluous humours. But what engendereth in such wounds or ruptions? nothing but new Ecchimosis, and much like vnto the first: That is to saie, when the flesh was first broken, except that this Ecchimosis that is new, of more and corrupter mattier than that which was at the beginning, which came of blood, and therefore now this is more easilie digested and resolued than that which was at the beginning. And thus ý which we haue spoken hetherto shall suffice for the disputation of Vlcers, & thus we conclude this fourth Boke of our Therapeutike methode, called Methodus Medendi.

FINIS.

THE FIFT BOOKE of Galen, called in Greeke θεραπευτικοι, and in Latine, Methodus Medendi.

The effect of the same.

1 The curation of vlcers which chaunce in the fleshie partes, and then the curation of Vlcers in the Instrumentall partes.

2 Of the ruption of a veine or Arterie.

3 How a fluxe of bloud may staie by deriuation.

4 The Medicaments that wil make a crust which doth much to the stopping of a flux of bloud.

5 Of spitting and distillation of bloud.

6 The curation of Vlcers in the pudend places.

7 The curation of a veine or diuided Arterie.

8 The reiecting of bloud both from other parts & also from the lungs.

The first Chapter.

SEeing that in the two last bookes we haue taught how anie shall rightlie cure Vlcers, we will by the waie shew, that all other Phisitions which vse the arte, not searching out the Elementes of those simple particulars in vs, cannot cure anie thing onelie by reason, but yet least of all other those which profesle Thessalus doctrine. The rest which are by meere experience onelie taught, suppose, that at the least those Vlcers which are in diuerse partes, are to bee cured by diuerse reasons. But those that followe Thessalus, (as their Captaine) for his excellent wisedome, thinke that euerie Vlcer, in what parte of the bodie so euer it bee, requireth like curation: for if it bee hollowe, they saie it must bee filled with flesh, if it bee equall, then to bee ciccatrized, if there bee supercrescent flesh, then that flesh must bee diminished, if it bee bloudie and new, then it must bee adglutinated: As though he that knew this, must of force cure rightlie, or that this reason were vnknowen to the common people, when as there is none that is herein ignorant. But they vnderstand not howe the hollownesse is to bee filled with flesh, neither howe that which is filled ought to bee ciccatrized, or to take awaie that is ouermuch encreased, or to ioyne together that which is pure and bloudie without hollownesse: such workes trulie are properlie appertaining to the art of Medicine, found out by the helpe either of Reason or Experience, or both.

Therefore repeating againe, let vs briefelie ouer-runne those things, wherby the beginning of these which are to be spoken, may be ioyned with the aid of those which we haue alreadie set out. Wee haue declared that euerie Vlcer requireth deliccatiue medicines, but that which hath hollownesse, beside that, it needeth desiccatiues, it also doeth require abstersiues: that which requireth to haue the lippes ioyned together, (such is a greene wound, called in Greeke Enema)

Enema) doth aske both more drying medicines, and also that be gentle astringent without anie abstersion.

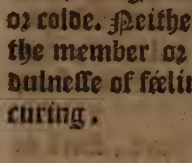
Furthermore, those vlcers which nede to be ciccatrized, require not onelie yet more drying medicines, but also strong astringent remedies, and whereas there is supercrescent flesh against nature, there are required sharpe and abating medicines, such of necessitie be hot and drie. If anie accident be ioyned with the Vlcer, the Indication of curation must be taken of the nature thereof, and of this all the faculties of medicines also to be had. If there should superfluous mattier growe in the Vlcer, it behoueth to haue medicines which should take it awaie, and such haue a greate deale more abstersiue vertue than some incarnatiue medicines haue.

Also if there be seene more copious moisture, there is nede of a medicine more desiccatiue, but yet not to excede his kinde, and if the medicine shoulde be glutinatiue, it ought to be drying and astringent, if it shall incarnate, it must be desiccatiue, and some thing abstersiue, and so in all other, as is alreadie declared. Also if the flesh subiect should be intemperate, first truelie we must cure this intemperatnesse, that which is drier, by medicines humectiue, the moist, by desiccatiues. Also that which is hot by refrigeratiues, the colde, by medicines that are hot. And if by coniunction of two qualities, the flesh be intemperate, it must be cured by ministring a contrarie medicine, which hath double qualities, for this one thing is common to all affects against nature, that they cannot come againe to their owne nature, without such medicines as haue contrarie qualitie.

Furthermore, at this time the causes of these intemperatiues are to be considered, whether these be common to all the whole bodie, or else proper of some partes, which should infest the vlcerate member by societie, the Grekes call it Simpathia. First of all trulie, the cause that nourisheth this intemperatnesse, is to be cured, and after that the intemperatnesse it selfe which is now made, for this indication, is common to all such as spring of anie cause.

We haue also declared that there are diuerse indications taken of the differences of vlcers, and also those which are taken of the temparament of the sicke bodie, haue a contrarie reason, for those Indications seeing they are taken of those things which are against nature, declare that all contrarie things must be applied: these Indications because they are taken of natures selfe, shew that like things must be vsed, for if how much the part is drier, so much the more it requireth to be dried, that which is lesse drie, is lesse to bee dried. In like sort trulie it is declared in making hot or colde. Neither haue we let passe that of the excellencie of the member or contrarie state. Also to the sharpnesse or dulnesse of feeling, there is to bee had a contrarie scope of curing.

The second Chapter.



Therefore we will now consider that which remaineth of the curation of this kinde of infirmities, we call this kinde, for more euident doctrines sake, solution of vnitie, neither is it anie matter, if thou call it solution of continuitie. This kinde doth not onelie happen in the similer and simple partes, but also in the compound and instrumentall, but yet there be other indications of remedies taken of the similer partes, then of the Instrumentall of which they that follow Hyppocrates methode, know both, because they know the natures of both partes. But those that follow Erasistratus and Herophilus, haue but one Indication, that is to saie, that which is taken of the Instrumentall partes. Wherefore they haue no certaine method in these, which follow whatsoeuer indications are taken of the bodie, or sickneſſe, hot, colde, moist, or drie, but yet they are not ignorant of the Indications taken of the forme, position, excellencie, quicke feeling of the part, or those which are contrarie. That which we saie shal be more manifest if we set out the the partes themselues. Therefore because alreadie abundantlie we haue entreated of those Vlcers, chiefflie which happen in the fleshie partes,

partes, it is time to speake of them which chaunce in the veine, and arterie, and nerue, and not of these absolutelie by themselues, but as they are in the instrumentall partes of man. Wherefore if anie hath a greate arterie or veine wounded, & there followeth presentlie great flux of bloud, and the wound in the veine will hardlie be glutinated in the arterie, it can more hardlie be done, as many Philitions suppose, but peraduenture cannot be done at all. Therfore we must againe speake of either of them, and first of the flure of bloud, and next of adglutination. But for that such fluxes are caused by Anastomasin and Diepedesin, as we presentlie declare, it shall not be from our purpose, for that they both haue a common cure, to make mention of them in this place, although they seme to be another kinde of disease, trulie the bloud floweth out of the veine or arterie, the mouth of them being opened, or their coate diuided, or as I may tearme it, strained or sent out in manner of sweate, surelie the coate of thē is diuided either by wounding, or contusion, or ruption, or erosion. Anastomasis happeneth, both through the imbecilitie of the vessels, and also through the plentie of bloud which breaketh to the mouth of it with violence, & furthermore by anie thing cōming outwardlie, hauing a sharpe qualitie.

Diapedesis commeth when as the coate is made more thin, and the bloud attenuated, and furthermore, it maye come to the mouth of anie of the small veines beeing opened. Therefore we must speake of either affect by himselfe, and first of all of that diuision which we haue sayd to come of erosion or wounding, or contusion, or ruption, so that those things which doe wound are edged toles, and apt to cutte, those that make contusion are heauie and harde, those that cause ruption, doe it by straining, the same doth also the vehemencie of anie action, the abundance of ill iuyce or humours, not in respect of the strength, but for that it is not contained in his vessells.

Also anie heauie or hard thing falling from aboue, entering in, for anie such thing when the vessels or veines are emptie, or else containing but a small substaunce entering

in it, if it hath an obiect which is hard, it causeth contusion; if the vessell be full, it bursteth it, before it maketh cõtusion. When that which happeneth is like, as if thou diddest fill a bottle or bladder, and diddest let a stone fall on it, or else violently diddest strike it against a stone, truely the like to this is that which happeneth to falles from aboue, for iuke what respects the bottle hath to the stone, the same hath the man vnto the ground, and whosoeuer breaketh any vessells of the lungs, with great and most vehement clamour, must refer the ill received, vnto the violẽce of the action. In like manner he which hath broke any vessells (that is to say, any veine or arterie) by bearing a great burden, or by going about to lift it on his shoulder, or else to lift it vp with his hands, & so much the rather, to whome it happeneth of most swift running, or most strong leaping, or otherwise, any part being violently extended. For it is like as if one should stretch out a rope, or leather, though many vessells are broken because they containe not the bloud in thẽ, chiefly when it is flatulent, as may appeare both in hogs-heads which full of must, doe oftentimes breake, & also in other of most strong bodies.

The third Chapter.

AND if the vessell be ruptured, either of wounding, clamour, fall, or contusion, the cause of these truely doe cease, but if it come of aboundance, it may againe happen that the vessell may be ruptured, the efficient cause is yet remayning, & also in this affect, ỹ abundance truly is to be euacuated, then the bloud to be suppressed, and after the vlcer to be cured, but where as the efficient cause is ceassed, there the bloud is first to be stenched, and after the vlcer is to be cured. How therefore, will we stench the bloud truely by stopping the ruptured vessel, the bloud that was caryed by it being auerted and conueied to another place, for if the bloud should be caried to the place vnto which it dyd in the beginning flow, and that the

mouth

mouth of the vessell be in like sorte open, the man truelie being vexed with the flure, shall soner die than the flure of bloud shal cease, surelie ỹ wounds wil be closed, if the sides which are diuided be brought together, or that the mouth of it be stopped, and the sides of the wounde closed by the helpe of our hands, if we may come to it with ligature, or such remedies as are colde and astringent. Neither is it lawfull to stitch the wound of a veine or arterie, as they affirme, who saie that no Indication is to be taken of the substance and nature of the wounded part, the mouth of the vessell shall be stopped, the bloud being then concealed, the Grækes call it Thombros, and also by things outwardlie applied on both sides about, may be put vpon it, and also in many wounds the skin it selfe, or what else we mixt with it, such are linaments, in Græke called Motos, & those medicines, because they haue a clammie and grose substance, doe stoppe the pores, the Grækes name them Emphlastica, as also medicines which make a crust, which the Grækes name Escharan. The olde Physitions despised these in such like wounds, as it were a great ieopardie. These also are done, not onelie by the fire it selfe, but also with medicines hauing a firie facultie, and the mouth of the vessell is stopped by these medicines, the bloud trulie shall be auerted and turned to other members, both bæing drawen vnto the nert partes, and also by reuulsion to the contrarie, the Grækes call that Parochetensis, but this Stuti Pasis, and these also bee inuented of Hyppocrates, being verilie the common remedies of all immoderate euacuation. Deriuation is made vnto the nert parts, when as that which is voided is euacuated by the nosethirlles. Also reuulsion to the contrarie partes, is when as it draweth downeward.

Againe, that which floweth by stole, that is deriued by the womans shape, but Reuulsion is vpwarde, for so truelie Nature is wont to doe. To the woman, sayth Hyppocrates, which vomiteth bloud, her naturall sickenesse following is a remedie, & for this cause if her fearmes abundantlie break out, or that bloud by anie waie floweth

out

out of the matrice, thou shalt drawe it vpward by fyring a great cucurbite or bore vnder the paps. For this also is inuented of Hyppocrates.

And by like reason the bléding at the nose is stayed by great cucurbites fired vnder the ribs, and if it floweth out of the right nosethrill, then the cucurbite is to be set vpon the liuer, but if it commeth out of the left nosethrill, then set cucurbite vpon the splene, but if the bloud floweth out of both nosethrills, then fire the cucurbits vpon both liuer and splene, but if the patient be not yet holpen, open a veine on the cubite that is right against the flure, and when as thou hast taken a little bloud awaie, stop it for an houres space, and then take againe more bloud, and so againe and againe, according to the strength of the Patient. In like sort, because it is a common waie of curing, thou shalt bring all other flures both to their contrarie parts, and also make deriuation by the next places, for that which floweth by the stole, to euacuate by vrine or the matrice, and that which floweth by vrine must be voided by stole or matrice. And of the flures of the Eies, Eares, and pallet of the mouth, the next deriuation is by the nosethrils, reuulsion trulie of all these higher parts, is euer to be made downward, and also of the lower parts vpward. Also from the right side to the left, as also from the left side to the right. In like sorte reuulsion of that which is within must be made outward, and of that which is outward in like sort inward, therfore friction of contrarie parts is done chieflie by those medicines which doe heate.

Also straight ligatures are to be reckoned among those remedies which bring to the contrarie partes, and so also is the shutting of the naturall pores set in the opposite place, but by what medicines that shall be done, the matter thereof is set out in our bookes of Medicines. But it behoueth to intreate of all Flures in the Bookes following. Now we must returne vnto the flur of bloud, and the band put on the vessells that flowe, are to be accounted among stopping medicines, and also our fingers, which do close and presse the vessels.

There

There is also another ligature hereto appertaining, which the Grekes call Epidesis, although it goeth not roud about the member, as a bande doth, but ioyneth the gaping lips of the wounded part by his embracing, & also holdeth such things as are put vpon the parte, and is numbred among closing medicines. Besides all these rehearsed, the apt situation of the wounded part, is accompted among the remedies which stay the flux of bloud.

Surely the situation shall be apt, if it be directed vnto these two endes, that the part be free from dolor, and be directed vpward, for if the part hang downe or is pained, it will not staye the flure, but will cause it, if there be none. Therefore he that knoweth these things, if at any time he shall stand by him out of whose wound bloud floweth, (for first I will entreate of these,) let him put his finger vpon the mouth of the vessell gently, strayning it and compressing it without dolor, for so he shall at once both staye the bloud, & also make it congele in the wound, but if the vessell from which it floweth, be depe hid, let him then surely both know the position and magnitude of it. And further more, whether it be a veine or arterie, then put it in a hooke and lyft it vp, and a little wyth it, but if the bloud will not so be stayed, if it be a veine let him without bynding, assay it, to stench the bloud with some of those medicines which haue power to stay bloud, truely the best are those Emplastique which are made of Rosin fryed, and the finest wheate flowre, and Gipsum, and such lyke, but if it be an arterie, thou shalt stay the flux with one of these two, either by binding it, or by cutting a sunder the whole vessell, and sometime truely we are also constrained to bynde the great veines, and to cut all these ouerthwart, and this necessitie happeneth in those where as the flure issueth out of the depest place, & chiefely by those parts that be straight and principall, for so is part of the other part drawen back, and the wound is hid and couered of the parts lying on it, but it is more safetie to doe both, that is, to binde the rote of the vessell, and also to cut of that remaineth, I call the rote of the vessel his former part, which is nerer the liuer,

or

or the heart: this in ỹ neck is the lower part, in the armes and in the shankes, from the higher part, & so in all other parts, & as thou maist learne by the anatomie which these methodelesse Thessalians do not allow.

The fourth Chapter.

THese things being done, the wound is first to be filled with flesh before thou take away the bande from the vessell, except the flesh engẽdred doeth fill the place about the cut arterie, but ỹ there is some wide space, the affect doth follow, which the Grecians call Aneurisma, wherefore I counsel thee to vse rather those kinde of medicines which stench bloud, for that through their clammines they stop the pores, the Greekes call it Emplasticon, than those which make an asker, because the wound after it is soner and with lesse daunger filled, for it is daunger in ỹ other, least there be made presently a new flux of bloud out of the vessel, if the crust falleth of. Therefore that medicine that I will now set here out, is the best that I know of all other, which I also vse without perill in fluxes of bloud, of the coates called Membrana, of the brayne, one part of Frãconcense mired with halfe one part of Aloes, after when thou wilt vse it tẽper it with so much white of an Egge, as it may be thicke lyke Honey, & put to these most soft haires of an Hare, and then apply it largely both to the vessell, and also to ỹ vlcer, binding it outwardly with a soft linnen roller, and let the roller goe foure or fiue times about the vessell that flowed, & then go toward the rote of the vessell in those parts, I meane, which may be rolled toward the rote, you may in all parts of the body except in the coates or membranes of the brayne, this being done, if thou wilt lose it the third daye, if the medicine doe cleave hard to the vlcer, put another vpon it as it were a liniament moystening that which is made of haires, and roll it againe as thou didst the first, but if the liniament fale leth away of his owne accord, then gently pulling the rote

of

of the vessell with thy fingers, that nothing flowe to the wound, take this away, the hand hanging downe, and put on an other. In this wise shalt thou cure the vessel vntill it be defended with flesh, and from the beginning to the ende, keping the part vpright, keping herein a measure in this figure of situation, for you must beware least that dolour chaufeth, and stirre againe flure, for there is nothing that doth more prouoke flure, and increase inflammation, than dolour.

This medicine (as I haue saide,) I vse many waies, sometime to the Aloes, the double waight of Francoencense, sometime equall portion of both, sometime the Francencense to be a little more than the Aloes, or else a greater portion, but not double, and sometime putting in the stead of Francontense, Manna, for Manna is a medicine that is more retringent than Franconcense, and Franconcense is more Emplastique than manna, and it is manifest that in hard bodies there must be the more portion of Aloes, as in soft more of Franconcense, so shall the one of them be more astringent, and the other by his clãmineße and grossencße, cleaning more to the small pores, which they call Emplasticoteron, therefore where thou wilt studie to make the medicine more Emplastique, it behoueth that thou vse those Franconcense that be tough, and as I may terme it, more Rosin lyke, such truely is softer and whiter, and when it is chawed as Aloes and Manna, is not made smaller, but defendeth the parts, cleauing together lyke Chiamastiche, but these are proper to that treatise, which sheweth the composition of medicines, which we could not but somewhat touch in this booke, for either we must neuer haue made mention of any particuler exãple, but haue bene satisfied with vniuersall methodes, or if particular should be put to vs the preparation of them was to be touched.

But as we before haue saide, it is conuenient that wee be here pleased with one or two examples, put out of those remedies which are inuented by Methode, and this thing I will still remember. But lette vs turne likewise to that againe, that in speaking we haue little finished,

and

and I haue made the longer mencion of these medicines rehearsed, because I am persuaded that it excelleth al other, and I maruell if it shall chaunce any man, to finde a better, therefore I vsed it alwayes in the Pānickles or Membranes of the brayne, and also in wounds of the necke, yea, of the Iugulane veines themselues, which the Greeke writers name Sphagitadas, insomuch as it also stayeth flux of bloud in them, and that without bynding, neither, in ioyning these, that thou make to much hast as certains folish Chirurgions doe vse, but compresse with the one hand the lower part of the vessell, or griping hold it with the other hand, apply the medicine to the wound, and gently presse it to the wound, vntill it cleaueth being congeled, after binde it from aboue backward, and not as in the ioynts from below vpward, for it behoueth to make your rolling toward the rote of the vessells, and to represse that which floweth. There are many other medicines which haue an emplastique facultie, yea, without griefe, but there is none that doth so incarnate.

It is chiefely to be regarded in this case, that the medicine falling of, that flesh be engendred about the vessel. But those medicines which make an alker, when the alker falleth of, they leaue the part more bare than for their naturall state, for the generatiō of the alker is (as I may terme it) of the partes subiect round about, halfe burnt, for what manner a thing these quenched coales are that they prouide against winter, such are the alkers being reliques of the adust flesh, so that how much of the part is burut to an alker, so much truely it loseth of his naturall flesh, therefore all that wāteth of the part where as ỹ alker falleth away, and so is scene bare and without flesh. And there hath followed to many a flux of bloud, that could hardly be stenched, after that the alker hath fallen of, wherefore who so will in these also minister all things by a method, he will long before consider all these wayes, wherewith bloud is stenched, and chose that which is with least daunger, not omitting the other wayes as often as necessitie requireth, for I haue found great necessitie of vsing medicines, ma-

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king an aſker, and alſo of hot yrons, whereas the flure of bloud ſprang of eroſion, of anie humour which did putrifie, as alſo in that affect where all that doth putrifie is taken of it, it is moſt ſafe to burne, as it were the rootes of it, or elſe to vſe medicines which make an aſkar, and by this occaſion we come to that neceſſitie both in the priuie members, and alſo in the fundament, becauſe thoſe partes both for their naturall heate, and that they be the conduites of Excrementes, they putrifie of a ſmall cauſe. That ſcope which thou tendeſt vnto, for thoſe medicines making an aſkar, muſt not onelie be hot, but ſuch as hath with it alſo ioyned ꝛ aſtringent facultie, ſuch is perceiued to be Chalcitis, and Miſi, and Vitriall, whether thou vſeſt them crude, or rawe, or adult. Thoſe that are made of vnſlaked Lime are more vehement than theſe, but yet Lime hath no aſtringent vertue, therefore the aſkars fall ſoner, of which are made with theſe, but thoſe that are made with aſtringent Medicines, doe longer cleaue to the bodies, which thing trulie is verie profitable, for that fleſh groweth vnderneath it, and is made as a certaine couering to the veſſell that floweth.

Wherefore it behoueth vs not to bee raſh, as manie bee in taking of the aſkers, whereas is perill of flure of bloud, except it bee in thoſe affectes, whereas through the putrefaction wee are compelled to applie to the bodie hotte yrons. All Phiſitions, I know not by what reaſon, call that affect in Greeke Nemon, of the Verbe Nemomai, which ſignifieth to feede or deuour, becauſe this affect procedeth by eating the ſicke partes, vnto thoſe that are found deuouring ſome part of them, ſo that they call it not of the ſubſtance of the thing ſhewed, but of an augmentation. The plentie of matter of all Medicines which haue this facultie, are ſet out in their proper Commentaries, I call them proper, whoſe Titles are De ſimplicibus Medicamentis, and alſo De compoſitione eorum.

The fift Chapter.

THerefore seeing we haue set out the sum of this method, whereby thou maist cure such flures of bloud as are in the vpper parte, we are bent to set out the Treatise of those flures which come out of the deapth of the bodie. The bloud that floweth out of the vessell, either is stenched for that it floweth no more to the parte, because the diuision is stopped, or else through both, which I suppose to bee most sure. But the bloud is let to flowe to the parte, either through binding, or when as it is diuerted to the contrarie partes, or is deriued to the parte adiacent, or by refrigeration, either of the whole bodie, or else of the affected partes, so that colde potions haue often staied the flure of bloud, as also colde things in fomentations outwardlie applied. In like sorte Oxicratum and sowre Wine, and anie other, that haue either astringent vertue, or onelie refrigeratiue facultie. And the diuision is shut, if that which is diuided, be drawen together, or closed, or els stopped Trulie it is drawen together both by restriction, and refrigeration, and ligature, and binding, but it is stopped either inwardlie or outwardlie, inwardlie by the bloud concealed, which the Grækes call Thombros, outwardlie, both with this, and also with Linamentes, Spunges, Alkars, and with such medicines, as through the clammie and grose substaunce doe stoppe the pores, the Grækes call them Emplastica, and also with putting the forelaide medicines to the hurt parte. How euerie of these shall be done, it is alreadie set out. But the flures of bloud which breake out of the dæpe partes of the bodie, cannot be stopped either by binding or ligature, no not with hot irons, and to bee briefe, neither with such things as we goe about to touch the diuided bodie with, or else the part, but rather with reuulsion and deriuation to the partes which are nert. Also meate and drinke which haue an Emplastique facultie, and by astringent medicines. Of these thou

haist

haue plentie in their proper volumes, what Indication is taken of the partes that happen to the common Indications curatiue rehearsed, as it were an ouerplus in euerie affect, for wee vse sometime Instrumentes according to the propertie of the part, some to the Matrixe, other to the Bladder, and other to all the thicke Intestines, for wee make mixtions of some profitable Medicines into the Intestines by a Clister, and into the Matrixe, by those which the Grækes call Metrenchitas, as into the Bladder, by pipes directlie pearced through. And truelie the fluxes of bloud by those partes, are rare, and yet sometime they chance. And although they are not dangerous by the profusion it selfe, yet when as they long continue, they are not voide of perill. For we did see bloud flowe out of the Matrixe foure daies, neither coulde it bee stopped by anie remedie, vntill wee stayed it, vsing the iuyce of Plantaine, for this medicine is most profitable to such fluxes of bloud as come through erosion, vnto which I doe vse to mixe in this case some more vehement medicine, and sometime an other which is proper for the affected parte, which thing is euer to be done, and to be receiued in all fluxes for the chiefest document.

For in these fluxes of the Matrixe, Bladder, and Intestines, the quantitie of the profusion is to be estæmed, that we may take it as the first or second indication of curation, and yet by the waie, not neglecting the cause of the whole affect: for if anie great vessell bee broken or vehementlie opened, and doth gape, wee nede astringent Medicines, as Balaustium and Hipocistes, and Rhoes, and Omphacium, and Acacia, and vnripe galles, and Malicorium, but if it be a little vessell that is rupturned, or but a little opened, so that the bloud bee not much which floweth out of it, Aloes and Manna, and the rinde of the Pine træe, and Sigella Lemnia, and the fruite of the Aegyptian Spine, and Saffron, and Lapis Hæmatites, and such lyke, bee profitable medicines giuen in redde and sowre Wine, but if thou canst not get anie such Wine, nor Plantaine, nor Nightshade, (for they are also good) wee maye boyle in

water the sprigs of Rubus, and of Caninus Rubus, and Mirtus, and Lentiscus, and Iuie, and to conclude, all such as haue an astringent vertue, whether it be rote or fruit, or rinde, or bud, and by like reason the decoction of astringent apples, and chiefelie Quinces, Pirtiles, and Medlers, is a conuenient remedie.

The sixt Chapter.

AND if there happen a certaine flure of erosion, the Grækes call it Anabrosin, it is not for the more part abundant, but small, and flowing by little and little, therefore you must vse the Trochisce of Pasionis, or Andronis, or Polyeida, or else of our inuention, which haue in kinde the same force, but more stronger. These cease the erosion, if regard be first had, (as is saide) to the whole bodie. But if the flure bee to abundant, wee must vse those medicines which are most vehementlie astringent, vntill the vehement force be broken, then mixe the Trochisce with them, and after you maye vse the Trochisce alone, with anie of the forenamed iuyces or decoctions.

And truelie the medicines which are outwardlie applyed to the parte, whether they be astringent, or colde without attriction, these I doe not alwaies allow (as many Phisitions doe) for they seeme to me to doe contrarie altogether to that which ought to be done, to kéepe the bloud within, and fill the vessells which are in the déep parts. We did see some of those which did cast forth bloud out of his lungs, to be manifestlie hurt by refrigerating the breast, so that some of them did vomit bloud, because their bellie was refrigerated, in like sorte, some of them that bleed in the nosethrils, were worse by refrigeration of the head. Therefore I counsaile not euer, or without difference, or in euerie time, that the places which are about the parte where as the bloud floweth, to be refrigerated, no not vntill thou hast first tourned it to the other partes. As for example:

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in flure at the nose, when thou hast bled (as I sayde) letting of bloud, or frictions of the ioynts, or binding, or firing cururbites vnder the ribbes. But thou shalt not forthwith vse to the forehead and head refrigerating medicines, but first reuulsion to the contrarie partes, firing in the toppe of the hinder part of the neck a cucurbite, or boring as it may be learned, for there is a double exertion of the flure of bloud at the nose, both that which is to the lower partes of the whole bodie, and that which is made to the hinder parts of the head, because the nose is placed both in the higher and also in the former parte, for that part which is low, is contrarie to that which is higher, and that which is behinde, to that which is before. But of flure of bloud, wee haue hetherto abundantlie spoken.

It is euident that the affect named Dyapedesis, is to be cured with astringent and refrigeratiue medicines, and if it chaunce at anie time through to thinne bloud, you must vse grose dyet. What this same diet is, wee shall hereafter set out, and we haue alreadie after a sorte set it out in our Booke, which is entituled, De Attenuante victu. Nowe we must retourne to the curation of the forenamed affects.

Therefore the Vlcer which is in the veine, if it be in the ouer part, hath the like curation to an vlcer in the flesh, of which I haue disputed in the two bookes going before this. For if it come of a greene wound, thou must make it close with medicines called Enæma, or if they come of erosion, you must discerne them first by reason, and what is spoken of the curation of rebellious vlcers, to proue that by diligence they may be healed.

Also when as thou wilt vse binding, or medicines stanching bloud, or hot yrons, that is the scope of curation, that thou doest incarnate the places about the lyppes of the Vlcer, and that thou vsest all together the sayde medicines, which are set out of vs in the methode of hollow Vlcers.

The seuenth Chapter.

WE haue now saide, that the arterie being wounded, seemeth to many Phisitions impossible to be closed. And that doe some of those affirme, who be professours of onelie Experience, and some bring this reason. For they saie, the one coate of the arterie is hard and cartilagious, but such bodies cannot knite together, when as the abilitie of kniting is onelie of soft bodies, as may appeare in extreame thinges, neuer stone ioyning to stone, or shell with shell, and also in our selues, for neither Cartilage with Cartilage, or bone with bone doth growe together, for broken bones truelie doe not cleaue together by knition, but are ioyning together by Callus, the Greekes call it Poron, as it were with Glew. Therefore we will also beginne first with our Experience, and put before your eyes those things that wee haue seene in women and children, both the arteries to bee conglutinated, and also to be compassed about with flesh, and that in the forehead, ancle, ioynt of the arme, and wrist, such a like thing happened in time past to a rusticall young man, when in the spring time he would be let bloud, which our Countrie men haue in great vse, but when the Phisition who should open the veine, had bound the mannes arme, it happened the arterie to rise bounching vp, and the Physlition opened it in stead of the veine, trulie the Orifice was verie small, the bloud straight waies issued out yealowe, thinne, and hot, and that as it were leaping, pulse like, and the Phisition truelie, like as hee was a verie young man, so was he little exercised in the workes of the Arte, though he had opened the veine, but when I with another of the auncienter Physitions that were present, did beholde that which had chanced, preparing a medicine of the kinde of Emplaisters that staunch bloud, I did both diligentlie ioyne the division, and also by and by laide the medicine

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on, and vpon it bound a most soft Spunge. He which had cut the arterie, meruailing of our straunge doing in this case, I tolde him what we had done, after we were out of the lodging of him that was let bloud, and we commaunded him that he did not lose it, we being absent, and that he should not goe about it vntill the fourth daie, but letting it remaine as it was, onelie moistning the Spunge, after we vnbinding it the fourth daie, we found the Incision conglutinated, and we bad him applie the same medicine againe, and binde him in lyke manner as before, and then after many daies to lose it, and so the cut arterie of this man was healed.

Among all other, I neuer salue none cut in the Cubite, but Aneurysma followed, to some greater, to other lesser. But how Aneurysma ought to be cured, we will hereafter in his proper place set out, whereas the curation shall be set out of Tumours against Nature. Now let vs finish our disputation begun.

Surelie the natures of the Arterie sheweth difficultie of conglutination of the harder coate, but yet not such as may not be ouercome, neither yet is it so drie and hard as a bone or cartilage, yea, it is a great deale more soft and fleshie than they are, so that we nede so much lesse to dispaire of the vnition of the diuision, when both the diuision is little, and the mans bodie naturallie soft. It semeth that Experience onelie doth also subscribe to Reason, when as I haue seene it glutinated in children and women, by reason of their moisture, and softnesse of their bodies and in one young man, whereas is sayd, the Arterie was but little diuided. And although an Arterie be harder to cure than a veine, yet there is no contrarie vse of medicines in both, yea, they be all one in kinde, varying onelie by reason of excesse and defect. For the Arterie doeth require so much more drying medicines than the veine, howe much by his proper nature he is of dryer temperament than the veine.

But if thou wilt engender flesh about both, they both require like medicines, for flesh is in like sorte engendered

in compalling the veines and arteries, as is shewed in filling of hollow Vlcers. And the veines and arteries that are in the matrix, bladder, or intestines, seeing that they require medicines like in kinde, when as they are exulcerated, they also require Instrumentes, whereby Iniections may bee made, Metrenchitas, that is, Clisters from the matrice, and a pipe bound right through, and a Clisser. And to these Vlcers which are in the intestines, you may make iniections of the liquide medicine, bloud warme, contayned in a bladder, vnto the end of which is annexed a right pipe. The substaunce of the medicines shall be varied according to the forme of the Instrument. Neither is it meete to poure into those Instruments grose medicines, but they require moisture, and therefore for the more part moderatlie hot. Therefore drie medicines are more apt than those that are named Liquide, because they are easilie mixed, either with the iuyce of Plantaine, or anie other of like kinde. Such be Saffron, and Pompholix, and Aloes, and those that in Greeke are called Cephalica. In the first time of engendering flesh, which is presentlie after the suppression of the bloud Terra Lemnia, is an healthfull remedie.

The eight Chapter.

BVT the Vlcers that are in the lungs, are more hard to be cured, and truelie in some the cure is not onelie difficill, but also seemeth not to be done at all, as well to them that followe Reason, as also to them that professe Experience by Reason, so that among the inward partes, it is thought to be continuallie moving, whereas those vlcers which are to be cured, require rest and quietnesse, as Experience sheweth, because they neuer sawe anie cured that was so affected. And peradventure we maye doubt of Experience. For it is meete that we beginne heere for knowledge sake, for wee haue seene one, for y he cried loude, another falling from an high

place,

place, and another striken in wrestling, not onely presently most grieuously to cough, so that also with the cough some to vomite one or two pynts of bloud, and some other more, of those that were in this case. Some of them were altogether without dolour, and some complained on their brest. Furthermore, the bloud in those that complained, was not cast out altogether, neither was it much and lesse red, or hot, as that which came a farre of, but to those that were voyde of griefe the bloud came gushing out, and much in quantitie, being red and hot, manifestly shewing that it came not farre of. Surely, the transsumption of the bloud, from the brest into Aspera Arteria, bringeth a great doubt, but of those Phisitions, who suppose that it cannot be sent out by the cote, which inuesteth the lunges. And peraduenture they would haue affirmed, that the bloud could neuer be voyded by the mouth, out of the brest.

Many of those that were affected, felt present dolour, & other hauing an inflammation, which after dyd supperate, shewed a manifest token that the affect was in the brest. But now being confounded by these signes, they graunt that it commeth from the brest. But while they seeke another way, yea, by the cote of the lungs, they are constrained to bring out many, and that absurde things, although as I suppose, they see most euidently in them, whome ỳ Greckes call Empios, the mattier it selfe, which they confesse to be in the middest space, betwixt the lungs & the brest, to be spyt out from the lungs. We verely haue vsed to them Melicratum, which was iniected into the brest, to be spyt out from the lungs, in those where was so great an Apostume, that part of the bones was putrified.

Surely at Rome, we haue seene such affects amongst the Romans, to haue after remained in the brest, so that of force we were faine to cut out the affected bone, and in many also the Pannickle, which within is ioyning to the ribbes. This being found putrified with ỳ corrupt ribbes, we are accustomed in this cure to vse Melicratum, to be put in by the vlcer, the paciẽt inclining himselfe on the affected part, to cough, and sometime hastely to blow his nose, and in the

meane time with an instrument that draweth out matter, the Grækes call it Pyulcon, to bring out the Melicratum, that remained, this being done when as we trusted that we had voyded out both all the mattier, and also ỳ Sanies, by ę by wée iniected Medicines, so that in these affects, if thou leauest in the cured space betwene the breast ę the lungs, any moisture, thou shalt presently cause the same to be cast out with coughing. Truely wée doe marualle of those that doubt of the waye by the lungs, why they doe not rather doubt how grosse bloud issueth out of the Callus of a fractured bone, for the bloud which issueth, is more grosser thã that which is natural, and the substance of the skinne is a great deale thicker than the pannickle inuesting the bones. Therefore as we saide, when as any vessell of the lungs is broken, either with falling, or with loude crying, and that without griefe there gusheth out much bloud hot and fresh, by coughing, you may vnderstand that the wound is in the lungs, the cure must be taken in hande after the manner that we often haue done, and that many tymes with good successe. Therefore we must commaund the pacient that he vse not great respiration, and furthermore, that he alwayes vse silence.

Furthermore, the inwarde veine of the Cubite must be opened, from which twice or thrise afterwarde thou shalt take bloud, because we may diuert it, then rub and binde all the the ioyntes, as we are wont. These thinges being done, thou shalt first giue him to drink Oxicratum, delayed, and bloud warme, that if in the inward part, there be any congeled bloud being resolued, it may be spit out, and thus doe twice or thrice in three houres, then giue him some medicine which both hath an Emplastique vertue, and is also astringent, and that first with delayed Oxicratum, or with the decoction of Myrtiles, or such lyke astringent.

Againe, at night giue him this medicine in like sorte, suffering him not to eate any thing if the affect be vehement, but else giue him of some supping, that shal be sufficient, and it shall chiefely profit, if the pacient be strong, if that the next day a little bloud be taken out of the deui-

ded.

ded veine, and so to continue in diet and medicines, as is afore said, vnto the fourth daie, the breast in the meane time, if it be in Summer, being moistned with oyle of Roses, in Winter, with Vnguento Nardino. And if thou wilt vse an Emplastique medicine, then hast an excellent one of our making, which boldly thou maist also vse to other wounds, it is made of Aspaltum and Vineger, and other which are accustomablie mixed to those medicines, which Phisitions call Enæma Barbara. But if thou cure a woman with childe, or him that hath soft flesh, the medicine that is called Diachalciteos, is verie conuenient, whose vertues I haue declared in the first booke of Composition of medicines. And by this waie we haue cured many, vnto whome we came presentlie as they felte paine, for this is the greatest thing, vnto which it behoueth thee to be greatlie attendant, whether presentlie vpon the rupture of the vessell, thou beginnest the curation, that thou dost adglutinate the greene wounde before there that be inflamation, for if inflamation flowe, there is after small hope of adglutination, but yet you may prolong the time. And the cause that such vlcers can hardlie or not at all be cured, is, that when the inflamation is cured, the mattier and Sanies of the vlcer are to be taken awaie, but in the matrix or bladder, they are voide of their owne accorde, when as the Patient lyeth groueling, and also we maye cleanse them. But in the lungs neither of these are to be done. Therefore in all vlcers which are in it, all the purging that is made, is onelie by coughing.

But if we commaund all quietnesse and small respiration, and to speake little, that the wound maye adglutinate, what hope can there be of curation to thē that cough, but the cure is to be dispaired of, for that through respiration this member doeth continuallie moue, and those that haue bene before our time do iudge it so, by ỹ vacuation of the mattier and Sanies. But if anie is presentlie cured by this waie, the wound wil close, and if inflamation do come, the cure is both hard and vncertaine, when as the mattier & Sanies, cannot be expelled out of the places of the lungs,

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and that the cough doe stretch the parts affected. But those that are brought out of the breast, haue a triple aduantage more than that which is euacuated out of the lungs. For the substance of Aspera Arteria, which is altogether drie, & voide of flesh, is not found in anie parte of a liuing creature. Those that falleth in the like, are wont to be broken, if anie other veine or arterie be ruptured, the Aspera Arteria remaining sound, the translation of the bloud is by opening of the mouths, called in Greeke Sunanastomasis, so that in such, the bloud which commeth out, is neither hot, nor red, nor yet much, and these affectes at the first seeme small, not inducing feare through the great euacuation, but trulie they are hereby the more perilous, for the bloud concealed about the ruptured parts, which cannot easilie passe through Aspera Arteria, letteth agglutination.

The ninth Chapter.

IN like sorte the woundes of Diaphragma, which are not outwardlie, being in the fleshie partes, are found to agglutinate, for all his motion, but those wounds that chaunce in the neruous partes are incurable, yea, trulie the curation also of those that are in the fleshie partes is difficill and hard, if that they bee once inflamed, and this is not onelie in Diaphragma, but also in all the partes contained within Peritoneum, because in it Sanies floweth, but we must giue diligence to drie them by all waies possible, both by those medicines which are outwardlie put in, but also by those that are taken in at the mouth, small wine to be giuen with these medicines, which is called Diasparmaton, and that which we haue in price, which also we vse in the breast that is wounded through, named Diacasia, but both these and also most medicines, which are outwardlie applied to such wounds, are spoken of at large in the Treatise of medicines. Here we onelie set out the methodes, which shew the waie of remedies. Wherefore if at anie time, we adde anie particularlie, thou

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must suppose we doe adde it onely for perspicuitie sake.

The tenth Chapter.

Therefore let vs againe repeat the former Methodes, & shew how much the generall curation of all vlcers, is particulerly to be changed, according to the seuerall parts of man. And hereof we shall chiefly learne ỹ which was purposed in the whole worke, that is, to erre so little as may be, in curations, as an appendix of their audacity, which call themselues Methodicians, who if you will credit mee, I accustome not to speake of flatterie or hatred, they being of all other Phisitions most voyde of Methode doe condemne. In that at the least they write, not onely of all the auncient Phisitions, but also Hippocrates, him selfe, author of all Methodes. But the Emperickes truely, say that all thinges which haue shewed to haue bene found out by indication, be knowen to them by experience.

Now seeing that there is not a third instrument of inuention, besides indication, and experience, these vsing neither of both, yet think themselues worthie to be called Methodicians: therefore let them follow vs, and now at the least, let them shew one way of curing all vlcers, in euery member. Let vs heare these good fellowes, by what way they will cure an vlcer, and what indications are taken of it, whether there is any other than ỹ vlcer which is plaine, to be ciccatrized, that which is hollow, to be filled with flesh, the græne wound, to be adglutinated. But how shal I finde that which will ciccatrize, and that which will incarnate, and that which will adglutinate, trauell not say they, they are alredie inuented, but I can not tell whether rightly, or whether all be found out, it may happen those ỹ are found out, to be of the worst, but the better are not yet inuented, or else those which are inuented be nought.

And hereof it commeth that certaine vlcers cannot be cured, either in longer time with dolour & needelesse fami-

shing,

thing, neither dare any of them go to a new experience, before he be perſuaded that he hath rightly condemned the former way of curing, as in theſe vlcers of the lungs, which can not be knowen at all without the knowledge of the anathomie, and of the actions alſo which they vtterly abhorre. But for this preſent let vs graunt that theſe Theſſalians know the vlcer that is in the lungs. But whether ſhall we in like caſe as we haue graunted this to them, alſo graunt that they know whether it is filthie, or pure, or equall, or hollow, or full of Sanies or mattier, or elſe that they doe know it by diuine inſpiration, or that they haue ſeene theſe by dreames, or ſhall we graunt that, that without the knowledge of theſe, euery medicine is to be applyed. I verely iudge that the mattier in filthie vlcers is firſt to be purged, and thoſe that be hollow and pure to be filled with fleſh, and then againe the mattier and Sanies which is about the Vlcer, to be purged, and then cicatriſe to be made.

But truely I know now how theſe haue cured ſuch vlcers, for Theſſalus hath nothing at all writtē of theſe, leaſt he ſhould bewray either his ignorance, or elſe inconſtancie, for either they ſpeake of theſe, that which is either not with reaſon, or that which is falſe, or if any will ſpeake truth, it behoueth that he take indication of thoſe vlcers, of the ſubſtance of the part, the ſituation and forme. For admitte that they know to diſcerne the vlcer in the lungs, filthie or pure, with inflammacion or elſe without: graunt we alſo vnto thē, although of a leſſe thing, yet of this they calling not the inuention to them ſelues, that ſuch an vlcer is to be mundified with the greene medicine of Macherion, or Iſis, all is one. Let them aunſwere me, if the vlcer be in the lungs, what will they doe? will they giue any of this greene medicine to be taken inwardly, it is altogether ridiculous, but let them ſay which way they know that medicine to be carried into the lungs, but if they might know that, neuertheleſſe the ignorant knoweth not whether it reſerueth ſtill that vertue which it had, being outwardly applyed to Vlcers, but admit that both they know this,

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and that it kéepeth his force still that it had, being outwardly applyed to vlcers, and that it doth purge the filth, yet can they not vnderstande whether it prouoketh coughing when as notwithstanding, except the filth should be expelled by coughing, there is no néede of a mundificatiue medicine. But we will also graunt them this thing, but yet they cannot deny, but that they vse a contrary cure, in the Vlcer of the thighes, and Vlcer of the lungs, for they cleanse the one with water, and mundifie the other by coughing.

Againe, imagine the vlcer of the lungs to be compassed with grosse mattier, will they also then giue the grene medicine, or rather commaund the pacient to licke Honey, but let them tell whereby they found this, truely I will not aunswere that because it hath a certaine facultie of extenuating or cutting, whē as they doe flye most willingly from searching out such faculties, but it is not méete that they should vse Honey, as the Empericks doe, who by many obseruations in the like case, haue founde Honey to profit, first because they despise experience, then for that the Empericks doe confesse that they know not what affect is in the lungs, in such like concourse, notwithstanding to haue by experience found out that which may profit, but it is not ynough for Thessalus to cure that which he doth not at all know, but he proceedeth of the indication of affects. But if we truely shall graūt as before, that he knoweth all things as well as our selues, yet can he not escape that, but that the way of curation is changed in diuers partes of the bodie, for it is not one way of curing to make iniection, with Mellieratum, into the matrice in a filthie vlcer, or to giue Honey to be eaten, or to washe the vlcer with a spounge, but these yet be but of small accompt, the other of great, let vs ymagine an olde Vlcer to be in many partes, without inflammations, as in the eye, eare, nose, mouth, thigh, belly, matrice, fundament, and priuie members, let it bee also, that the same Vlcer is either playne or wanteth a little hereof.

Let these Thess. which haue neuer separated these, and were

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vs how they will cicatrize it, forsoth with Diacadmia, for that can well cicatrize an vlcer which is in the thigh, but can that also cicatrise that which is in the eare? I wil declare to you a thing perchaunce incredible, but yet knowne to the Gods. I once found one of these most sapient Thessalians curing an olde vlcer in this sort, when as the eare of the man dyd putrifie, & wormes grew in it, for that it was to sone cicatrised with Diacadmia, notwithstanding suffering him many dayes to vse the lyke medicine, was because the eare did dayly more grieuously stincke, and was filled with matter, we see him presume a more incredible thing than before, for he supposing ý in the depth of the eare, there was inflammation, he vsed Tetrapharmacon, which truely must more increase, the putrifaction of the part, because it cannot ericate the vlcer, but maturate the inflammation, & when as he had vsed this medicine one daye, to cure the affect, and thou maist know it to be most repugnant, by and by there was a great dele more matter, and an intollerable stench, wherefore the friends of the pacient would not suffer the Thessalian, to touch any more the eare, & he truely of impudencie and folishnesse, would not onely put in some of the Tetrapharmacon, but outwardly also apply a relaxing emplaister, but when as the kinsfolke of the pacient drew him away, suspecting the pacient to be in great perill, I desired them that the Thessalian might haue the curation one day longer. For the next day after, the matter was more aboundant, and the stench most greuous, which day I dyd assay, whether I might change the minde of the Thessalian, least he should kill those that were sicke: ye forsaken sect, so far voide of all methode, might yet saue some hereafter, though they be few, then I began with the fellow in this sort, whether or no sayd I, seemeth it vnto thée, that there is an inflammation in the inward part of the eare, & therefore thou vsest relaxatiue medicines, and he did stoutly vouch it so to be, and also that it could not be otherwise: whether or no sayd I, hast thou séene at any time an Vlcer ioyned with inflãmation to be cured, with most sharpe Vineger and Glauces? Neuer in my lyfe sayth hée, for if any

doe

do vse the Trochisce of Andro dissolued in vineger, he may peraduenture cause conuulsion: Ergo (sayd I) if one vseth another medicine more stronger than the Andronian Trochisce, in most sharpe vineger, and that to the eare, which is a parte so neere the braine, and his coates, whether thou being iudge, shall he make conuulsion, and especiallie if there bee inflammation, these thinges semed to bee true both to him and to the companie present, wherefore in the respect of the state of the partes, which require such as maye chiefelie exiccate, but nowe being made tender with the curation, I would vse such a medicine.

Now for that thou hast abused them manie daies, it is not meete at once, or at one brunt, to tourne them to the contrarie, for it is lawfull for thee and Thessalus to contemne custome, as well as the nature of the partes, but thou maist not so doe, but the first daie I will vse Vineger with Glaucium, the second daie the Trochise of Andron, and the third daie I will goe to a more vehement medicine than the Trochisce of Andro is, and vsing this three or foure dayes, if then I shall perceiue the Vlcer to require a more vehement medicine, I wil nothing doubt to vse it, & outwardlie I will applie it to the part of the head, where the eare is infected, now surelie as thou doest a relaxing Cataplasme, but some one medicine that can vehementlie exiccate, such a medicine as is made with Salicen, or else applie Andronean Trochisce with Vineger, or some other that doeth more drie, for seeing the parte which wee cure is most drie, it behoueth most stronglie to drie it, for that the affect it selfe may be cured, it sheweth that the contrarie must bee applied to the parte it selfe that it is most like vnto, and so as I haue sayde, I wrought and cured the man without anie more vehement medicine. But to certaine other which require more stronger medicines, whereas the Vlcer had infested the eare one or two yeares, wee applyed a medicine more vehement than these rehearsed, and that was Scorta Ferri, beaten and searced through a most fine Search, and after brought as

it were vnto fine flower, and ofter boiled in moſt ſtrong Vineger vnto the thickneſſe of Honie, it is certaine that there muſt bée a great deale of Vineger in the mixture, but as I haue often ſayde, thou muſt ſéke thée plentie of medicines in other of our Commentaries.

Now wée haue finiſhed that belongeth to a methode, for ſéeing the place of hearing is moſt drie, it doth require medicines that may moſt vehementlie exiccate, which wée may not applie to anie other part, but to the vlcerate part, peraduenture the Collirium made of Dialibanoton, vnto the noſe.

Alſo it behoueth to vſe that which is more drying than in the eies, but yet not ſo much as to the eares. Wherefore all the Trochiſce rehearſed be profitable, and alſo the medicine aſcribed to Muſa, and other of the like kinde. All Vlcers of the mouth if the be moiſt, requirey vehement exiccatiues, as Diaphrigis, both alone, and alſo mixed with Honie, or Wine, or Oximell, and further, that which is called Iris Anthera, and theſe either drie, either mixed with Honie. Alſo Muſa is a medicine for theſe profitable. Alſo the iuyce of Rhois and Omphacine, and other which doe ſtronglie drie. What doe I tarrie in rehearſing theſe matters? But the ſimpler Vlcers of the mouth maye aptlie bée cured by medicines which do moderatly dry, as theſe, which for that they are in continuall vſe, are called Stomatica, ſuch medicines bée Diamoron, and of the fruite of Rubus, and of the iuyce of grene huſkes of Walnuttes, and yet more than theſe, that which is made of Muſt and Cipreſſe, and thoſe Vlcers of the mouth that are verie moiſt, nére vnto the bones, ſo that the bones bée in daunger to be putrified, theſe bécauſe of the nature of the bones which is drie, requireth moſt vehement deſiccatiues, therefore I doe alwayes make fine the Trochiſce aforeſayde, and put to theſe medicines drie.

The

The xi. Chapter.

Furthermore, wee haue before set out the kind of medicines meete for the bladder, matrixe, and Intestines, and lungs, which you must vse in euerie of them, taking the kind of the medicine of the substance of the sicke parte, but first considering the affect, and taking the waie of vsing them, of the forme and scituation, and hereof sprang clisters, for the mouth in Greeke called Otenchitas, and Clisters for the Matrixe, named Metrenchitas & Catheteras, and the Clisters for other partes. Vlcers in the stomacke, breast, and lungs, are cured by those medicines which are eaten and dronken: the Vlcers in the Intestines are two waies cured, for those that are next to the stomacke, are cured by those medicines which are eaten and dronken, and those which are lower in the intestines, are cured by iniections made, when neither that which is ministred by low by Clisters, can come to those Vlcers that are nere vnto the stomacke, neither that which is receiued at the mouth, can in full strength come to the lower partes, and so the Vlcers in the breast and lunges, are more hardlie cured than those in the stomacke, for that they are further off, and there the strength of the medicine somewhat abated, and for this cause the medicines receiued at the mouth, ought to bee stronger than those which are presentlie applied to the Vlcer, and for that cause the Phisitions haue excogitated most strong and cutting medicines, whereas they will purge the mattier in the breast and lunges, yea verilie, such as would cicatrize the Vlcer if it were in the stomacke.

Also that this is throwen out by coughing, that is taken of the forme of the partes, because these haue no such passage, as the matrix, bladder, eare, nose, and mouth, and hereof commeth it, that the stomacke may be purged two waies, vpward by vomite, and downward by the stole, for this kinde of Indication is taken of the Instrumentall

partes, inasmuch as they be instrumentall, like as those that are to bee exiccated, are taken of the nature of the similer partes of the affectes themselues againe, such as in Vlcers, because our disputation was of them, but that they are to bee dried, as is before set out, and also if they will purge mattier in the stomacke, they cannot without daunger prouoke vomite, for if there bee fleame fixed in it, to cleanse it by Drimell and rootes, but they shall more safelie vse deiection when it is perillous, least hee that vomiteth shoulde teare that is vlcerate, and should attract some ill iuyce from the partes adiacent, and for this cause the Vlcers of the lungs are most harde to bee cured, because thou canst not purge them but by coughing, and if thou prouokest the cough, thou tearest the partes, so that the ill by mutuall succesle, cometh to a circle, or as we may terme it, made worse, for those partes which are torne, doe againe make inflammation, and secondlie the inflammation must bee maturated, and the mattier againe requireth to bee purged, so that of all these the cure is made difficill, both for that those medicines which are conuenient, cannot touch the Vlcers, as they may in the stomacke, and that in the midde waie, they lose well neere their vertue. And further, because by respiration they are moued, and are rent by coughing, wherfore when as anie vessell in the lunges is ruptured, if it be not agglutinated before there commeth inflammation, knowe thou that afterward it is incurable.

The xij. Chapter.

BVt the vlcers which are in the inward cote of Aspera Arteria, & chiefly which are neere Larinx, or else in it these may bee cured, and we haue healed diuerse which were so affected, trulie we finde the curation of these vlcers, by this occasion, in the beginning of this great Pestilence (which I praie God may once ceasse) a young man who had beene sicke nowe nine dayes,

all

all his bodie brake out full of vlcers, which happened well nere to all that escaped, & that daie he coughed somewhat, the daie following when he had bathed him, he forthwith coughed more vehementlie, and therewith voided a little crust named Ephelcis, and the man had manifest feeling of an vlcer in Aspera Arteria, that is in the necke nere vnto Iugulum, and he also opening his mouth, we looked in his throate, if that there were anie vlcer in it, but we could see none, and truelie the patient should manifestlie haue felte it, by the going downe of the meate and drinke, if anie had bene there, and we also to be more certaine, made him take certaine things with Vineger and Mustard, but none of these did bite him, and yet he felt dolour and paine in his necke, in which place he was so vexed, that he was constrained to coughe, we perswaded him all that we might, that he should resist it, and not cough, which thing he did, and that with the more ease. For that which dyd irritate was little, and we by all possible meanes, gaue diligence to cicatrize the Vlcer, applying outwardlie medicines exiccatiues, and he lying vpright, we gaue him moist of those medicines, which are good in such lyke vlcers, bidding him to holde it in his mouth, and by little and little to let it flowe into Aspera Arteria, he so doing, saide he felt manifestlie the force of an astringent medicine aboue the Vlcer, whether that the force of it by transumption was sent thether, or whether the medicine it selfe in forme of a dew floweth through the Arterie, as it were strained to the Vlcer, the patient himself was voide of the knowledge in Phisicke, being of the number of those which cure by vse, and exercitation emperiklie.

Therefore he sayd that he felt both the medicine flow into the arterie, and that it also sometime prouoked coughing, but he did much striue and staied the cough, and he of his owne accord, being taken with ỹ sickneſſe at Rome, remained three dayes after the nine daies were past, after taking shippe first he sailed through a Riuer to the Sea, the fourth daie after he came by shipping to Tabia, and vsed the milke, which hath a meruailous vertue, and not

without cause commended. Of which somewhat to speak, the time it selfe giueth occasion, and not onelie of that milke we will speake which is at Tabia, but also of all other milke, neither must we onelie helpe those which are in Italie, but all other Nations as much as we can. Wherefore touching the milke in Tabia, there doe come many things touching his praise, both the place it selfe beeing of sufficient light, and the aire compassing about beeing drie, and the healthfull fodder for the Cattell, and this also may anie doe by arte in other places, if anie shew the hearbes and shrubbes, in an hill somewhat high, which may make the milke both astringent and healthfull, of which we wil hereafter shew examples. But yet thou canst not also make the aire ambient, in like sort therfore thou maist chose the likest there as thou art.

The aire shall bee most like where there are such things like it, the height of the hil moderate, thirtie furlong from the Sea, or somewhat more, the place it selfe toward the Sea, for Tabia is in the lowest straight which is betwirte Surrentum and Naplis, but more one the side toward Surrentum.

Furthermore, all that side of the hill is of good bignesse, stretching in length to the Sea Tirrhenum, this hill doeth a little bend towarde the West, neither goeth it wholie towarde the South, therefore this Hill doth keepe the straight free from the winde which bloweth from the East, Eurus subsolanus and Boreas, there is ioyned to this in the lowest of the straight, another bigge Hill, which the auncient Romanes in their Hystories, and those also that bee now diligent, call Vesuuium, now Vesuuium is a famous and new name, and knowen to all men, for the fire sent out of the earth in it, which thing doth not as I thinke, helpe to the dryncsse of the aire, and that beside the fire, there is not in all the straight either standing water, marrish, or cloud of anie account, this Vesuuius Hill is toward all those windes, which blowe from the North toward the Eastuall setting of the Sunne, and much ashes commeth from it, euen to the Sea, beeing the ashes of that

was

burnt in the hill, and of that which yet is burned, all these make the aire drie: surelie there may bée the like drie hill in other partes of the earth found, that is not farre from the Sea, neither yet so bigge, that it is subiect to the violence of windes, nor yet so lowe, that it shall receiue easilie the vapours of the fieldes. Beware also that it bée not toward the North, so shoulde it bée auerted from the Sunne, and if it may bée in a temperate place of the world as that is which is at Tabias, it should so much profite, let the beastes in the Hill be these, Agrostus, and Lotus, and Poligonon, and Melissofillon, the shrubbes, also Lentiscus, Arbutus, and Rubus, and Hedera; and Cetisis, and such lyke, and so hast thou the hill preparcd. The Cattell that doe fede on the Hill at Tabias, are kine, and the milke of these beastes is as thicke as the milke of Asses is thin, and I truelie least there shoulde bée anie kinde of milke that might profite, wanting of kine thicke milke, of Asses thinne, and of Goates that which is a meane, I did put in to fede, both kine, Asses, and Goates, the olde Phisitions would haue a woman giuing milke, to those that are consumed with Pthoe, to stande and giue them sucke, vnto whose minde I agree, both for that it is naturall, and also for that they would haue it taken before it were refrigerated of the ambient aire.

Furthermore, let this bée to thée a great precept, that those that shall haue nede to drinke milke, that the beast standing present, they drinke it presentlie as it is milked, putting Honie into it, whereas it curdeth in the stomacke, or if thou wilt haue it spedelier to passe into the bellie, adde some salt. And the young man that had an vlcer through the Pestilence in Aspera Arteria, was cured of it, and manie other after him.

Another young man of xviij. yeares in age, when as he was vexed with Catarrhus many daies, first with the cough he voided bloud fresh, but not much, after that, a péce of the pannicle which outwardlie coureth all Aspera Arteria, ascending vnto Larinx, it séemed to me, coniecturing both by his thicknesse, and féeling of the patient to be the inward

tunicle of Larinx, but this hurt not his voice, and this also though in longer time, it was perfectlie cured, but those which come to this affect through the Pestilence, séemed to bé verie easilie cured, for that his whole bodie was héere purged and dried, for that many of them did vomite, and all were made laratiue, so that those which escaped wer purged, they had blacke Pustules aboundantlie through the whole bodie. In many they were vlcerous, but in all they were drie, and it was manifest to many that beheld them, that they were the dregges of the bloud, which putrified in the Feauer, which as it were lyke certaine ashes, Nature did thrust out to the skinne, lyke as it thrust out manie other superfluities, but there is no nede of Medicines for these Exanthemata, when they fall off by themselues in this sorte, those that had the vpper parte of the skinne vlcerate, the crust of the vlcer fell off, and the parte vnder it was almost whole, and after a daie or two was ciccatrized, others whose skinne was not vlcerate, the Exanthemata it selfe was rough and scabbie, and fell awaie like a certaine scale, and after were cured, therefore it is no meruaile though those that haue Exanthemata in the lungs, be cured because of the drinesse of the Vlcers, the which before wé haue shewed, that the purposed scope of curation in all Vlcers, that in these Vlcers springing through the pestilence, was héere present, for they were all drie and rough, and many of them like to a scab, and many like Lepria, therfore séeing that Experience testifieth with reason, and that the curation of vlcers haue this one end, that is to saie, to be cricated, you may saue many of those that casteth forth bloud from the lungs, as we our selues haue done.

The thirteenth Chapter.

NOw we haue before declared how those shall be cured, that haue broken anie great vessell of the lungs, either through falling frō high, or ỳ they immoderatly did strain them in crying, or did beare a burthen

aboue

aboue their strength, or any hard or waightie thing outwardly haue fallen on their brest, but how they may be cõmenientlye cured, which putteth forth bloud, through Catarrhus, we shall now declare, putting for more manifest doctrine, a like example, of that the curation which was done to a noble woman at Rome, when as she heard such like talke, as we right now had of those, that reiecteth bloud out of the lungs, & that she had spit out in the night, somewhat either through Catarrhus, or through coughing, presently she sent for mé, promising her selfe to be obedient to all thinges, I would commaund her, for she had heard before that time, some ỹ if one applyed not presently strong medicines, and that before the Vlcer was inflamed, all was in vaine, and that this was the cause of their destruction, which reiected bloud, therefore we thought not good to let hir bloud, because through the drienesse of hir bodie, she had abstained foure dayes from meate. But commaunded that she should vse sharpe clisters, then with some hot medicine, to rubbe much the thighes and handes, and after to shaue the head, on which I layd the medicine ỹ is made of Stockdoues dung, and after three houres, I bathed hir, not touching the head with any fat things, thus I couered the head with a conuenient cap, and for that time I nourished hir with supping, after which, I gaue hir some of the Auster fruites of Autumne, and when she went to bed, I gaue hir of Triakle foure monthes olde, and being no elder, it hath yet the iuyce of Popy, somewhat strong, which is more dul in that which is olde, therefore it prouoketh slẽpe, and dryeth flures, & doth a little make thick, and the Catarrhe perfectly gone, it did manifestly appeare both by the kinde of respiration and noyse, that once the lungs néeded purging, by prouoking the cough, but that pleased me not. At ỹ least the second day, but keping hir in all silence, and rubbing also the ioyntes, and binding them, I commaunded all the other parts of the bodie to be rubbed, the head except, which yet was hot by the medicine, againe at night, I gaue hir of Triakle as much as one of our country beanes in quantity, and this was not so much by a great deale, as that she had

receiued the daye before, after that she had also slept well this night; the third day betimes I gaue hir largely of boyled Honey, and kept hir in quiet, and the day increasing, I as before did rub all hir bodie, and gaue hir to eate a Ptisan with a little bread, ỹ fourth day betimes, I gaue hir Triacle, that was olde, mixed with Honey largely, and putting on the womans head the same medicine, which did vehemently daye and heate, she being bathed & moderatly nourished, I began the first day to purge the lungs more vehemently, and after that againe and againe, I vsed the surrup called Diatapsias, and I set all the studie about the bodie, ingestation, friction, walking and abstaining from bathing and in dyet, that was both moderate and also of good iuyce to nourish. This woman was perfectly well, hauing no neede of milke.

An other young man, when as he had cast vp halfe a pinte of bloud, through coughing, which came through distillation, but to the refrigerating the instruments of breathing, presently I let him bloud. And the same day twise I toke away bloud, and of that same veine, againe the day following, I toke bloud twise, but vsing the day before both rubbing of the ioynts and binding, at night we gaue him our medicine, called Diasparmaton. The second daye after the other taking away of bloud, I applyed to all his breast, a cerote called Diathapsia, taking it away againe at night, least that it should to much heate. The third day againe I layd it to three houres, and after bathed him. I did nourish him in maner afore said the third day, the first two dayes with supping, the third daye first with the iuyce of Ptisana, after forthwith with some flesh which was of easie concoction, and simply prepared.

I gaue also at night, the second and the third daye, the medicine Diasparmaton, because it doth induce sleepe, and take away paine, and hath power to ericcate, and when the members of respiration were in their naturall temperature, and all the bodie emptie, and that there was no suspicion of inflammation about the mixtured place, I began to purge him, after that drinking Triacle of twenty yeres olde,

olde, I sent him to Tabias, and in this sort I cured all those which came to me the first daie.

The xiiij. Chapter.

THose that came after two or three daies, the vlcer was not cured in the all, but in certaine, as many as had inflamation so great, that they had a Feauer, of these there was none perfectlie cured, but following orderlie, all the helpes, that the vlcer might be dried, they did so much that it increased no more, but being dried, and indurated with Callus, they liued longer. And those that haue an vlcer in the lungs, comming through erosion of ill iuyce, they seeme all to me to be vncurable, of whome some haue saide, that they feele their spittle as salt liquour, and that the malice of ill iuyce, require a long time or it be corrected, and in time one of these two must of force followe, either drying the vlcer to make Callus, and so the affect to remaine incurable, or else not drying, it doth putrifie, and also deuour the partes about it, and so in time the lungs to putrifie further, among those that had ill iuyce, & thereof did cough, yet not reiecting hetherto bloud, by these our prouidence were made perfect: at the first it doth behoue to be most carefull, that neither the cough, neither that annie thing floweth out of the head into the lungs, he shall die that by a three folde remedie: first by purging, next by taking Diasparmaton, and last, by hauing regard to the head.

That which shall purge, must haue diuerse faculties, to purge diuerse kindes of extrements, of which sorte are our Pills, which are made of Aloes, Scammonie, Colocinthis, Agarice, Boellium, and gum Arabice, they wil also suffice, which are made without gums, & after if need require, vse to purge black choler. The head shal be prouided for with ỳ cerote called Diathapsia, & these are at the first to be done.

After

After the Patient is to be nourished with meates of good iuyce, friction, walking, and bathing, we will shew the method of these in a conuenient place of our worke, and surelie these are such as haue most nèd of milke, and those that neglect it, of all other are incurable, but as concerning letting of them bloud, know that those which séeme to haue a little bloud, being brought, as is said, to some better iuyce, thou may let bloud, and againe restore in like sort. Also to purge, and againe restore, and then againe if nède bée, to let bloud, and especiallie whereas the masse of bloud, is as it were a vicious and grose skin, but those that are strong, and haue much bloud, must by and by at the beginning bee let bloud.

The xv. Chapter.

THere is none of all these, which I haue either now, or before declared, that I haue inuented or bred, according to Hyppocrates waie, which is not examined and approued by iudgement, but also tried by experience, in which we suffered the perilles of the error. They shall haue profit by the vse of them that haue regard to the workes of the arte, for some of their talkes are true, and some sophisticall, but what speake I of Sophists? when as there are some Phisitions of estimation, which haue set out whole volumes of reiection of bloud, and haue written many small rules right well, making no mention of anie principall remedie, vnderstanding by little and little, those thinges which rightlie admoueth the sick to get his health againe, in those that are not altogether desperate, and are cured by letting bloud and purgation, and those things which strengthen the head, and wée shall hereafter speake more diligentlie of letting bloud, when as we shall shew the curation of ill iuyce. Therefore wée must not begin, as many Phisitions iudge, with small remedies, neither must we thinke as they doe saie, that these small remedies are first to be proued, and then if they doe

profit

profit nothing we shall apply greater, this opinion is true in such diseases as are without daunger, but it is furthest from reason, to begin with small remedies, where the patient must die, if he once haue Pthoe. For like as all other things are rightly set out of Hippocrates, so also is that Aphorisme rightly sayd, that vnto extreme diseases, principally extreme remedies profit, by what opinion therefore was Erasistratus so madde, so slow & dull in the beginning of such affects, but after when occasion was past, to be so diligent, for being perswaded by a most fond reason, he neuer doth let bloud, when as bloud is required, nor purgeth any man, or yet doth vricate his head. Frō which things if the patient being in daunger of that Pthoe, keepe and abstaine himselfe, although all other things be rightly done, I think he doth nothing more, for he refuseth to let bloud, and doth onely vse to diuert it with binding of the ioynts, whereby as he himselfe saith, there may remaine plentie of bloud against the time of inflammation, and that we be not for want of it, to nourish ỹ patient, but peraduenture some wil say: sir how Erasistratus? If after the ruptured veine, the inflammation occupieth the lungs, there is no cause why thou shalt hope to cure the man, for considerations which I haue set out before. Wherefore he shall now no more nēde this trauell, being betrayed, or deceiued, by thē at the beginning, for he doth like to a gouernour of a shippe, when through his negligence, the ship is cast away, he geueth to some one of the passengers a boorde in his hande, and perswadeth him so to saue his lyfe, but Erasistratus, perchaunce did suppose, that an inflammation was in the number of those, that necessarily follow a wound. Notwithstanding if he so thought, he was in great ignorance, when any man may behold great wounds without inflammation, to be glutinated, of fyue hundreth, such as dayly doe fight a combat, so that the second, or fourth daye, they be in safetie, and we haue cured many of those, who had some vessells of ỹ lungs ruptured, by falling, crying, or stripe, before ỹ any inflammation sprang in the ruptured vessel, and if he doe affirme any of these, to haue inflammation of the lungs, he doth

repugne with his owne decrées, affirming both that, and the principall couering, which is nert to the heart, to haue inflammation, and also to be frée from a feauer, also the inflammation being broken the man to voyde out nothing. Therefore againe, let him heare of vs, that the Vlcer can not be agglutinated, if the lungs be inflamed, and that if inflammation commeth, of force he shall haue a Feuer, and that when the inflammation is broken, the patient shall with coughing voyde mattier.

Therefore if one hath neuer a Feuer, or cough, nor voided no Sanies, from the vlcer, and inflammation, by what reason is ther in the lungs of this man any inflammation. Therefore both this principall remedie is vniustly of him condemned, & also he letteth slip purging, without making mention of it, it is no medicine of affect, set out of him against any of the forenamed kinde of griefes, but if ỳ head send downe flux, it shall be kept in the same state, or if that cough followeth, through intemperatenesse of the members seruing respiration, that shall also so remaine, so that Erasistratus, shall be like vnto the Image maker, who, when the partes were perfectly made and finished, he left the Image without eyes, for to what beautie I pray you are the other parts, when as thou wantest thine eies. Afterward a Gods name, séeing so excellent men haue erred, that famous man Thessalus, which doth not at all know the art, iudgeth himselfe worthie to be called a Methoditian, and we sée now almost all his disciples to let bloud, not onely to many vnto whome blood letting is not profitable, but also to those kinde of remedies which ought to be iudged hurtfull, especially, if they should stand in their owne suppositions, and also to those that are strong, which reiect and put forth bloud, either by vomiting, or coughing, but how shall these hang together, that both they byd to let bloud, where there is reiecting of bloud, and that in their Commentaries they write the remedie, herein to agrée with adstrict diseases.

Now therefore let them call them selues no more Methodicians, but Emperickes. If setting apart reason, which

they

they thinck to be right, to vse onely experience, to the finding out of remedies, are they not in these most clearely found neither by reason, neither by any Methode, to doe any thing. Much more when as they say the parts are vnprofitable, to the finding out of the cure.

But if any doth call to minde those thinges which wée haue taught, of the Eares, Nose, Eyes, Mouth, Breast, and Lungs, also of that we haue said, of the matrix, bladder, and stomacke, he shall finde them to erre, all the way, such one was he, that to the inflammation in the secrete parts, he applyed the Macedonian medicine, and with this also a relaxing Cataplasme, euen that notable one, that is made of Bread, water, and Oyle, also a nother like to him who vsed the same medicines to the place exulcerate.

But we will speake of such, when we shall dispute of inflammations, but those Vlcers, which are in the yarde, or fundament, without inflammation, require no relaxing Cataplasme, but a Ciccatrizing medicine, not onely of that nature, that may ciccatrze the Vlcers in the flesh, but that they may so much the more exciccate, as these partes are dryer than the flesh, yea, and that which thou maist more maruell, the Vlcers which are in the ende of the yarde called Pene, are more to be dryed, and those which are in the necke of the Bladder, called Cole, and those which are without the ende of it, called the Acorne or Glans.

But the Vlcers in the fore-skinne are to be lesse dryed, and yet lesse than these, whatsoeuer are in the skinne which couereth. Therefore when as one of these Methodlesse Phisitions (I meane these Thessalians) could not cure a moyst Vlcer, in the Acorne, or Glance, with Epulotike medicines, that is with such as doe make a ciccatrize.

He chose mé of counsel, & when he heard of mé the part required a more drying medicin, because it was of drier nature, he did forthw beleue me, but being of force cõstrained to vse some of our medicines, ỹ vlcer was cured in. 3. daies, and

and it did well appere that the Phisition reioyced, not so much in the health of the patient, as he was sorowfull he was trained vp in ill kinde of doctrine, for the medicines vsed of vs which is made of Paper combust, cureth these kinde of vlcers, like as Dill and Gourds, being combusted and strowed vpon the grieued part, and vsed as before, and other like which in like sort doe vehemently drye, & if there be any such vlcer, voyde of moysture, to such onely Aloes is a conuenient medicine, it must be sprinkled in, but dryed and made into most fine pouder, and it doth also cure well the vlcers of the fundament, with dry Cadmia, washed in wine and dryed, hath the same vertue, and Litharge is of like facultie, next in vertue is Molibdena, and Pomphelix, doth lesse induce dolor than the rest, and is not to any of them inferior.

If the vlcers be moist, both the rinde of the Pine tree alone, and also Lapis Hematites, be very good, and if ther be any depenesse, when as thou wilt rayse flesh, put to any of the foresaide medicines, so much Manna, as shall suffise to incarnate withall, neither doth this Methodlesse sect, know any of these, so much as by dreaming, seeing they suppose that euery wound, in what part of the bodie so euer it be, require one curation, neither how it behoueth to cure certaine wounds, as those which doe happen to Abdomen, of which in the booke following we shall intreat, with all those which yet doe remaine.

FINIS.

THE SIXT BOOKE of Galen, called in Greeke θεραπευτικοῦ, and in Latine, Methodus Medendi.

The effect of the same.

1. The curation of the Nerues contused, and the tendons vulnerated.
2. The curation of wounds which are in Peritoneum.
3. The curation of the inward wounds of Peritoneum which reach to Abdomen and Omentum.
4. The curation of the affects which chance to the bones.

The first Chapter.

NOthing doubt but that there be manie, vnto whome I doe seeme prolix, in that I haue hetherto set out, how by a methode one kinde of disease may be cured. It is truelie meete, that they do not so much impute the length of them vnto me, as vnto these, who litle vnderstanding such thinges, as Hyppocrates most trulie hath written, do vniustlie goe about to reprehend them, who as I haue shewed, doe not know how to cure rightlie an vlcer, much lesse then, that which is greater, and that one kinde of disease, in which an vlcer is numbred. It skilleth not whether you cal it solution of continuitie, or vnitie, which now is shewed, and the method of curing it, in what member of the bodie so euer it bee, keepeth the common Indications, which are taken of the affect, but those that be taken of the partes will haue other affectes. When this happeneth in the fleshie partes, it is called an vlcer, and hath indication of curing, which is common to all affects against nature, ỹ is, the affect it selfe, which as it is an affect, is to be taken awaie by his contrarie, as diuision by vnition, for the generation of this affect consisteth in diuision of vnitie, and therfore in the bone it is called a fracture, in Greeke Catagma, in the neruous pannicles Spasma, in the muscles, a ruption, whose differences are before set out, yet to this disease when as it happeneth in a vein or arterie, it hath no proper name, but borroweth sometime the name of an vlcer, sometime of a wound, and sometime of a ruption, but wee haue often saide, that he ought not to be so carefull for the names, whose scope is, to finde out the knowledge of things. Therefore neglecting names, let vs rather hast hither, seeing that health to the patient commeth not of exquisite imposition of names, but through conuenient remedies: again,

let

let vs call to minde this moſt impudent Theſſalus, which ſetting out no method of curing an vlcer, ſuppoſeth that he hath ſhewed them all, for verie idiots do know, that an hollow vlcer muſt be filled, & a ſimple wound adglutinated, yet doth not the vulgar people know by what method he may finde medicines, wherewith that which is hollow may bee filled, or that which is ſimple may be adglutinated, & that is put out to be conſidered of the Phiſition, in which one excelleth another, for as we haue heeretofore ſaid, who that is exercitſed in the curatiue method, ſhall both finde out remedies, and alſo vſe rightlie ſuch as are alreadie inuented.

The ſecond Chapter.

And that we may now ſet out anie thing ỹ may hence forth agrẽ with that is before ſet out, let vs faine one to come vnto vs, who hath only his ſkin pricked with a needle, if this man be ſuch a one, in whom vlcers will eaſilie be healed, if thou let him go to his accuſtomed labours without medicine, yea, ỹ mẽber being alſo bare, he ſhall taſt of no ill, but if he be ſuch a one in whom vlcers will hardlie be cured, then the mẽber will firſt ake, then haue a pulſe, & alſo inflamation, but the Emperike ſhal learne the nature of the patient, by examining & queſtioning, we truly by ſuch examination, vſing al theſe things which are found out by experience, & nothing the leſſe by thoſe ſigns, which we take of the natures of good & ill iuyce. And furthermore, of thoſe which be of quicke or dull feeling. Moreouer, of thoſe which are burthened with fulneſſe, or haue but little iuyce, being not ignorant that he ſhalbe oppreſſed with inflamation, which is either Plethorique, or haue euil iuyce, the Grecians call them Cacochymici, or is of quicke feeling, or vexed with ſome of theſe, or elſe with all, & that he that is contrarie ſhall feele no hurt, & we beholding theſe things, wil not put to adglutinatiue. Such are many of their medicines which are called Enema, & bee preſentlie applied to greene woundes, but a ſoft medicine and gentle, & that ſhall aſſwage dolour, but when as there is a great diuiſion, there we muſt bend our ſtudie ỹ the lips

of the wound, may be vnited and closed with desiccatiues, and where the diuision is made with a nædle or stæle, there regard must chieflie be had, that the part be not vexed with inflamation, and hereof it is manifest, that the indication of a grene wound set out of Thessalus, doth hetherto teach vs no more than euerie priuate person knoweth, for it is no great matter to knowe what behoueth to bee done, being a thing naturallie grafted in all men, but to know how thou shalt performe it, that onelie doth belong to Artists, for if anie should build a ship, we all know (yea, being no Shipwrights) in what place the things which gouerne the ship are to be placed, in what place the starne must bee, and where the beke shoulde stand, and all the rest, yet all these profit vs nothing, being ignorant how the ship is to bee builed. In like sorte, he that goeth about to build an house, is not ignorant, that the foundations of the walles are first to be layde, neither that the walles set on these, or that are to bee erected, ought to bee directlie right, neither that the rofe must be set on these walles, neither that the windowes, dores, and other partes of the house must bee accordinglie placed, but what doeth these thinges helpe to the building of a House, insomuch as he being ignorant in the arte of building, knoweth not how to builde it. Therefore it seemeth sufficient vnto Thessalus, of all other men most sapient, touching an artificious knowledge, to vnderstand what ought to be done, but we haue shewed in these Bookes before written, that this is but a certaine beginning of those workes which are loked for of the Artists, being no proper part of the arte, but such as is common to all men, for the first indications in euerie arte, are naturallie grafted in all men.

Wherefore if this bee sufficient to make Artists, what letteth but we may build ships, and make matter, and all men maye readilie make shoes, and garments, and houses, and also to be Architectes, Musitions, and Rethoritions, but it is not so, neyther is he a Physition, that knoweth howe that there must bee made naturall vnion in the wounded parte, but hee which vnderstan-

vnderstandeth with what thinges that maye be done, although that this is not inough, if he knew not how to vse them, but he onlie is a Phisition, who knoweth all the way so farre, vntill he may attaine his desired scope. Therefore it happeneth to these methodlesse Disciples of Thessalus, that presuming great thinges aboue their might, they attaine not vnto those, which otherwise they might. For when one latelie was wounded with a Stile in the hand, in such sorte, that all the skinne beeing diuided, some of the nerues vnder was pricked, a sapient Thessalian in the beginning applyed an emplaister, which hee often vsed with good successe in great wounds, he thought (I suppose) that euerie wound had one curation, but an inflammation following, hee applied a Cataplasme, which is made of wheat floure, and so rotting the member, killed him within seauen daies. Neither can it bee numbred how manie haue perished by conuulsion, happening into their Peoman handes. Whereby if God will, this Thessalians decree may bee kept, and euerie greene Vlcer is like to bee healed, and that the partes affected giuing no indication. But the true methode is not as this methodlesse methode of Thessalus, but euen now, and that after so great Phisitions, there may bee found, not onelie better medicines than haue bene, but also a vniuersall waie of curing, for no man vsing presentlie at the beginning those medicines which we haue inuented, fell into conuulsion, for I truelie noted where of a nerue was, and how there followe of necessitie greater dolour than in other partes, because it hath sharpnesse of feeling, and that also of force there followeth inflammation, except one did all wage the dolour, and let the generation of inflammation.

Therefore it seemeth reasonable to mee, that the wound of the skin bee kept open, and without glutination, whereby the mattier may flowe out of the wound, and then to vnburthen the bodie of all superfluities, and chiefelie to be carefull that the wounded parte bee free from dolour, so I haue excogitated not a fewe medicines, which beeing applyed to the wound, doeth meruailouslie serue both vses,

both to mittigate dolour, and to make way to the comming out of the mattier, and it shal bee more sure if the skinne be wider cut, and that the bodie bee emptied by bloud letting, if the Patient bee strong. And if the bodie bee full of ill humours, presentlie purge him, and warme water, (although it doth much mittigate other inflammations,) it is most hurtfull to wounded nerues, seeing their substance is made of a moister mattier refrigerated and conicaled, and all such constitution is resolued, and doeth putrifie by those thinges which doe both make hot and moist, therefore I kept those which were thus wounded frem warme water, iudging it meeter to foment the place with warme oyle, because that I haue also shewed, that oyle beeing applyed colde, doth stoppe the small pores, but if it be hot, it doth digest.

Furthermore, I sled also crude oyle, called in Greeke Omotriues, and that which had an astringent faculty, & those which was most thinne, as Sabinum, which if it be two or three yeeres olde, is the more profitable, for because that which is olde, doth more digest by euaporation than that which is new, and how much elder it is, so much it is able to digest, but yet it doth lesse cease dolour in medicines. All my whole scope was to haue their faculties attenuated, and moderatlie heating, and which might exiccate without inducing of dolour, seeing that this onelie could drawe the mattier from the bottome, the part being thereby neyther contracted nor yet bitten. Trulie I first vsed Turpentine and Rosen both alone, and mixing with it also a little Euphorbium, I vsed it alone in Children and Women, and generallie in softe bodies, but with Euphorbium in hard bodies: in like sorte also Propolis, both alone, and softning it also with Euphorbium, and if it were more hard with some thin oyle. I vse also in hard bodies Sagapenum, mixing it with oyle and Turpentine, and after the like sort also I vse Apoponax, euen as I doe Sagapenum. Also Lachrima, Epreniaca, is not vnprofitable, if one make an emplaister of it, in such sorte as wee haue made with Euphorbium, but wee haue not approued this by experience, as we

haue

haue done all the other, for it behoueth that the inuention of remedies which commeth from a true methode, doth goe before, and then experience for the more certaintie to follow this, and we hope that by the same Method. Also Sulphure which hath not touched fire, nor is ronie, but of thin parts, shall profite him that is wounded in the neruie partes, mixing so much of it with thinne oyle, as that it come to the thicknesse of Sordium, or as you would saie, rotten matter which commeth out of a sore, and in strong and harde bodies thou shalt profit if it bee as thicke as Honie, for that is also allowed by Experience, we haue also excogitated, to applie to this wound washed Lime mixed with thicke Oyle, which if it were washed with the Sea water, it wold more profite, it is best to wash it in the dogge daies, and if thou doest wash it three or foure times, the medicine is the better, but in what manner such medicines are to bee prepared, thou shalt vnderstand in our Commentaries which we haue set out of the composition of Medicines. And it is heere sufficient for mee to shewe that I haue inuented both these, and many other medicines against the woundes of Nerues, seeing that I neuer sawe them vsed vnder anie Maister, neither yet see them sette out in anie of the olde Bookes of curing, or in the Bookes of the faculties of the auncient Phisitions, but I take indication of the nature of thinges, which I thinke to be the office of the Phisitions which vseth a Method.

But this wonderfull Thessalus, when he neuer yet inuented one medicine, doeth affirme, that euen nowe the matter of them to be knowen, but the matter of many medicines, which wee haue excogitated, is not onelie vnknowen to Thessalus, and the Phisitions before his time, but vnto those which hath beene since, vntill this daie. For I in times past beeing called vnto one, which was made rotten of these methodelesse Thessalian Phisitions, and beheld that hee woulde applie that Cataplasme which is made of Wheate meale, hauing no other medicine present, I asked of a certaine Potter, neighbour to the patient

some lée, and by boiling it in Barlie meale, and not in oyle and water, as he did the Wheate meale, I applyed it. After which, in like sorte, the meale of Eruum boiled, I applied it to the nerue, the inflammation béeing inflamed and rotten, by the good cure of these Thessalians, I deliuered the Patient from the same putrefaction. But of these woundes which putrifie with inflamation, wée will largelie dispute in a conuenient place of this worke, and that is now sayde is sufficient for wounded nerues. And truelie among those medicines which wée haue found out, manie do vse that emplaister which is made of Euphorbium, Ware, and molten Rosen, and so to make a composition thereof, and some suppose it to be my inuention, but I made it so at the first, and peraduenture some mixed with it Flos Salis, or such like thinges, which might alter the choler, and not diminish the vertue of the medicine, but through ignorance one may adde such lyke things, that shall change the vertue of it. But wée made it of Ware, Rosen, Turpentine, Pitch, and Euphorbium, putting in one parte of Ware, of Turpentine, and Pitch, of each, halfe a parte, so that the quantitie of these two, maye bée more than the Ware, or you may mixe the one of these with the Ware, and also in the scarcenesse of Turpentine, you may aptlie vse Humidum pineam, that is to saie, moist Perrosen, and also to put into these Abietenam, but Scrobilina, is onelie méete for harde bodies, wherefore it is not to bée mixt for softe bodies, therefore if thou doest mixe Humidam resinam, then put that in thy Euphorbion beaten and searced, to the other béeing molten, let the waight of it be the twelfth part of the ware, or a little more, when as thou determinest to make the medicine stronger, but if it be drie as Fucta is, then the Euphorbion desireth a little oyle, wherefore I beating it with oile, and making it to thicknesse of Honie or Sordium (which is thicke matter) the other after the melting béeing colde, I doe mixe them, stirring them together.

Also I often mixe in making the medicine so much water as maye quite euapour awaie and bée consumed,

in

in melting the mixed simples. But all this kinde doe most appertaine to the treatise of compounding medicines. Now it sufficeth as before we haue done, to put for exãples sake, a fewe particularly, shewing what the kinde of medicine ought to be, for thou shalt finde in our worke, De simplicibus medicamentis, a copious matter of medicines, and you must prepare them, as I shewed in the worke of their compositions. Wherefore it is sufficient to haue declared thus much, and to passe forth to other things.

The curation of the wounded Nerue, doth require medicines which may prouoke a moist heate, and doe strongly dry, and that also by the substance of their making, hath power to attract, and is of thinne partes: truely the curatiue methode, doth not onely profit to the inuention of medicines and diet, but also to the vse of these which are inuented, for like as before we haue declared, so now also we doe affirme, that he which goeth about to finde apt medicines for an Vlcer, without a methode, cannot vse the least of them rightly. For he is able to cure by a certaine Method, who vnderstandeth how much the application of the medicine, hath either dryed the affect, or made hot, or mitigated, or increased, for he onely doth know how to adde vnto those which he vsed at the first, or to take away from them. For when one had applyed at the first to a wounded Nerue Dia Euphorbion, or that he had luckely before made proofe of it, he shewed mee how the third daye that the wounded part had dolour and inflammation, marualling that the medicine did nothing profit, I then asked the patient, whether the first day when the medicine was applyed, he felt not a soft heate, as it were of the Sunne, and he denyed to haue felt any such thing. Then againe, I asked the Phisition, how long he had that medicine by him prepared, and when he had cured with it, he answered, that he had it a yere, and had cured with it two children, and a young man, & when I demaunded of the body of the yõg man: he affirmed that it was white, and soft, whé I heard these things, perceiuing that there lacked Euphorbium, for this young mans temperature.

I demaund the Emplaister, and also Euphorbium, and taking of both, so much as I thought sufficient to mixe them together, I bad him soften the medicine with his handes, & so beat the Euphorbium diligently, and these being done, I bad him mixe them together, and I making somewhat hot, Oyle of Sauine, which was olde, and foment therewith the wounded part. And opening lightly the puncture which was close, I did put the medicine into the hole, and willed him to abstain from meate. I bad also the Phisition, that when he did take it away at night, that he should vse the oyle in like sort as he had seene mee. And these being obserued, the day following the affected part, was found void of dolour and inflammation. And all they that were present, vnderstode that to be most true, (that we often saye) the medicine can doe no great thing, except there be one, that can rightly vse it. For the right vse is that, which proceedeth by the same Methode, which we haue often set out in the bookes going before.

All the vse of medicines being referred vnto it, colde, moyst, & drye, as vnto certaine rules, which Methode these Methodiesse followers of Thessalus, are not able rightly to follow, neither yet Erasistratus, or any other Phisitiõ which hath not sought out the Elementes of bodies, or hath put out other thinges than those which wee haue here comprehended.

The third Chapter.

But if the Nerue be not pricked but cut, you must consider in what sort it is woũded. Whether it be cut ouerthwart, or in length: and also how much of it is deuided.

Lette vs first put for an example that there is so great diuision of the skinne, that the bare Nerue doth appeare, and that this Nerue is cut in length, and not ouerthwart, thou shalt not apply to this Nerue any of the rehearsed medicines, which are made of Euphorbium, or sharpe medicines of like kinde.

For

For the bare nerue cannot now abide their force, as when the skinne was betwixt it and the medicine. Therfore vse thou in this case washed Lime dissolued in much oyle, and also Diapompholix is verie profitable dissolued in a great quantitie of oyle of Roses, and it shall be the better, if both the Oyle of Roses, and also the oyle to be without Salt, for all the scope of curing the Nerue bæing bare, is to exiccate without biting, and truelie there be few medicines which can so worke. Therfore in this case in the Summer let him be washed in healthfull fresh water, let also the Pompholix bæ, (as is afore sayde) washed, because it hath many other simples, which are not washed. For all medicies which consist of mettalles, ought to haue all these washed, if they shall exiccate without mordication.

That is also an healthfull medicine, which is made of Honie Plaister wise, bæing made of the best Honie, and this be resolued in oyle of Roses, which in all respectes is the best, and voide of Salt, yea, and the Ware also which is put into such medicines must be washed in like sort. If thou putteſt in anie Turpentine, it behoueth that thou wash it, and so much the soner if thou put anie other Turpentine in, for the sharpe and biting Sanies is washed and purged awaie by all medicines which thou doest wash. But if hæ that is wounded bæ strong in bodie, and voide of superfluous excrements, in him it is requisite to vse more strong medicines. As I once did, whē as a young man studious in Philosophie was wounded in the breast, hauing a good strong bodie, and burnt with the Sun in the Summer season. The Trochisce of Polida dissolued in Sope, and afterward made warme, bæing put ouer hot water, I applyed it as a Liniment. For that first of all we must haue regarde that nothing bæ colde which toucheth the wound. For because the affected part is most sensible, and also the chiefe of the principall partes are continuall, and of temperament cold: by which all occasions that is grieued is with cold, & sendeth also his greiefe to the braine But if it be of these ỹ come into the muscles, it causeth also conuulsiō.

For

For we haue shewed in our Anathomie, that the muscles are the instruments of voluntarie motion, and the like conuulsion shall be loked for in the tendons, by the same causes, but when as I had applied the foresaid medicine to the wound of this young man, and had couered much of the partes aboue the wound, with the same I did continuallie foment with hot oyle the partes about the arme pits, neck, and head, and opening a veine, the first daie I toke some blood from him, and the fourth daie this young man also was well, insomuch as the vlcer loked wrinkled, small, and shrunke together, notwithstanding I thought good to continue with the same medicines vntill the seauenth daie, after which daie he was perfectlie well. Trulie you may foment this wound with oyle, and chieflie as we haue saide, when it is cured, for oyle is of contrarie nature to the Trochisce, and maketh the Vlcer filthie, neither is there small difference to applie oyle to a bare nerue, & where the skin coureth it.

Therefore the matter is to be wiped awaie from the wound with a probe, hauing soft lint rolled about it. You may if you will, wet your Lint in Sapa, least that thou touch the Vlcer with drith: with Sapa, that is, Sirium, called also with vs and in Asia, Hepsama, therefore dipping thy lint in this, and after pressing it out, thou shalt mundifie the Vlcer, and let this Sapa bee warme the first daies chiefly, but if all things doe prosperously succéd, thou maist wet it also without daunger with swéte Wine, for all swéte wine is void of all biting qualitie, such is the wine called Thereum and Scybelites. And next these is, Carginum, what Wines so euer are swéte and peolowish, such is Falerun being vnprofitable, for all these are sharpe and vnmeasurable hot. And the vlcer comming now to cicatrize, white and thin Wine, and that which will not abide the mixture with water, neither swéte smelling, is better than swéte wine, and thou shalt eschue the vse of water to a wounded nerue, and also a relaxing Cataplasme: next vnto the vse of these Trochisces, is the vse of Diachalceos, which we openlie vse, this must be molten in Sumer with oyle

oyle of Roses, but in winter with the Oyle of Sauine, we haue described this medicine in the first booke of compounding medicines, the Pastilles, or Trochisces, or call them how you lyst of Polyda, are knowne to all men, which if you haue not, you may take the Trochisce of Andro, or Pasio, or elles our owne, which is stronger than the rest.

And we haue declared that to strong bodies, strong medicines are conuenient, as to tender bodies, gentle medicines: this right Methode haue I inuented, and experience doth confirme it, but Thessalaus with his Sophistes, sitting in his high throne, shall be had in reputation among brute people, as Cercidas saith. While he confirmeth by his reasons, that there is one curation of greene wounds, neither this to require any Indication to the nature of the parts; yet one of so great fame in his learning hath ertogitated, a marueilous cure of wounded Nerues, for presently he cutteth them a sunder, geuing the wounded man no warning thereof, although in this he goeth from his secte, for it had bene better to cut a sunder the wounded muscles and arteries, & veines, or any other thing, but not the Neruе, otherwise that thing which they flie, they are found to doe, that they may take a contrary indication, for the difference of the parts: but let vs leaue them, and intreate of a Neruе wounded ouerthwart, in which there is greater feare of conuulsion, inflammation comming of Feuers, which are not cut, but those which pertaine to the cure of the Vlcer, are like also to these. Yet it behoueth more largely to take away bloud, and vse more thinne diet, and to kæpe him altogether quiet in a soft bed, and to foment largely with hot Oyle, the arme pits, necke, tendons, ligaments and head, & if the wounded Neruе be in these, that are in the legges, like as we vsed Oyle to the arme pittes, when the wound was in the hand, so in these the flankes are largely to be fomented with Oyle, and so to ascend, by the whole spine, to the necke, and head. And the contused Nerues, whereas the skinne also is contused and wounded, require the same medicines which is vsed in dryng the wounds of the Nerues. But yet such medicines as may further draw & constringe

or

or binde the parts hiuded by contusion: but those which are contused without the like affect of the skinne, ought to be fomented often with hot Oyle, which haue power to euaporate, and to haue like regard to the whole bodie, as I saw this to happen, and dyd spedely cure it, fomenting it with oyle, but haue often seene the Nerues, to be contused with the skinne, and the wrestlers for the custome of the accident, being taught by vse, haue a Cataplasme made of Drinell and Beane floure, which truely is an healthfull medicine, but if dolour also commeth with contusion, it doth behoue to put in molten pytch, and boyle them well together, and so to apply the medicine hot, and if thou wilt make it more drying, put in the floure of Ervum, and if thou wilt haue it yet more drying, put in Irisibrica; the regard to be had to the whole bodie, it is common to these, as if the Nerue be all cut, there resteth after no perill of conuulsion, but yet ỳ part shalbe weake, it hath the same cure, that the other Vlcers haue, although the Thessalians know but one: therefore we haue aboundantly intreated of Nerues, but how we shall cure the inflammation that commeth to them, we shall set out when as we shall intreate of Phlegmone.

The fourth Chapter.

SEing that the ligaments (called in Greke Syndesmous) be of like kinde to the tendones, they can suffer the force of most vehemẽt medicines, because they do not come to the braine, and be voide also of feeling, for all the Nerues come either from the braine, or else from the marow in the spine of the backe, the tendones also as we haue shewed their substaunce, is compounded of the Nerue, & Ligament, they so farre forth spring from the braine, as they participate of the substance of the Nerue. But yet are lesse vexed with cõuulsion than the Nerues.

But

But the ligaments forsoth, seeing they spring of the bone, those that are round, are like vnto Nerues, but differ from them much in hardnesse, yet in that they are white without bloud, and not hollow, and deuided into Fibers, they are like the Nerues and tendones, so that they which are ignorant in the Anatomie, when as they see the round ligaments and tendones, they take them for Nerues, and chiefely they which vnderstande not that they are harder than ỹ Nerues, but where they are brode, there they know them to differ from Nerues: But they cannot discerne thē among them selues, but thou which knowest the natures of all their parts, and also their forme, and in what place they are, in the whole bodie, and in what part of the bodie it happeneth a wound to be made, thou doest presently vnderstand whether it be a Neruе that is wounded, or a ligament or tendon.

If the ligament woūded be such one, as goeth from bone to bone, it is chiefely without daunger, and that thou drying it with all kinde of desiccatiues, shal not any thing hurt the patient, but if it goeth into the muscle, how much it is lesse dangerous than in the Neruе and Tendon, so much the more it ought to be feared, if it be not rightly cured, and none of these can be brought to passe, by a methode of these Phisitions, which deny the indication that is taken of the part, to be profitable to the curation of Vlcers, neyther yet of such as doe confesse this, if they be ignorant in the nature of euery parte, which as we haue shewed, consisteth of the temperament of Elements. But although these know no other thing: yet at the least they vnderstād that they are shewed of the constitution of the instrumentall parts.

Thessalus truely and his Disciples, are also very ignorant herein, as if Abdomen were now presently wounded, so deepe, that some intestine came forth, they know nothing at all how it ought to be put in, and if Omentum fall out, whether it is to be cut away or not, or whether it is to be trussed vp or no, or whether the wounde must be stitched or not, or if it be stitched, in what wise it ought to be done,

neither

neither should we haue vnderstanded these things, if we had not learned by reason of the Anatomie, the nature of all the parts therein conteined, which truely to declare, is a thing necessary, not only for the better vnderstanding that shall follow: but also for probation, the skin is most outward, of all this, and is ended in a thinne pannicle called Membrana, within the skinne, as it was in the mid place there is a double neruous thinnesse of the Muscles, which the Grecians call Aponeurosis, stretched out in manner of coates or membranes, many Anatomistes are ignorant, that they be two, when as they so cleaue and ioyne together in such wise, as it requireth labor to separate them, and also for that they are most thinne: nexte these immediately followeth two right and fleshie muscles, which stretch from the breast to Ossa pubis, and all these rehearsed, cleaue and grow together, and that which is made of these, the Grecians which haue set out the way, when ỹ stitching of Abdomen, ought to be made, called Gastroraphias, named Epigastrion, that is to say Abdomen, that which is next these, is called Peritoneon, and they thought it to be one simple bodie, but falsely, seeing that it is made of two bodies, both which are without bloud and Neruous, but one of these Neruous thinne pānicles belōgeth to those muscles, which goe ouerthwart: the other being very thin lyke a cobweb, is the true Perotineum, and Abdomen, is such a like thing in the middest of it selfe, the parts of it which are distant, and on both sides, as it were foure fingers breath, at the side euen from the skinne haue the oblike muscles, the former which came from the breast, the next which ascend from the intestines, & after these muscles, that which is ouerthwart. Vnder which is Peritoneum, therefore there is lesse daunger in this place, than in the middest, seeing it hath no such thinne coate or pannicle, and that they cal Aponeurosis, and that stitching may hardly be made in the middest, because that chiefely in this part, the intestines goeth out, and may hardly be put in; and the muscles that dyd constraine and draw them, be the right and fleshie muscles, which I sayde came from the breast to Os pubis, therefore of force the intes-

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stine commyth out through two causes, as oft as anie of these bee wounded from the partes which are on the side, because that is gathered together by the muscles, which are there from the middle partes, because the muscle which should containe them is not strong inough, & that the place is verie apt for comming forth, & if the wound be greater, then of force more Intestines must fall out, and are more hardlie put in againe.

Furthermore, for another cause, small woundes are harde to bee handled; for except that which commeth out bee presentlie put in his place againe, it is inflamed, and riseth in tumor, so that it cannot be put in by so straight an hole, therefore in such woundes, the meane hole is lesse daungerous, and it is truelie necessarie to knowe these thinges: then it followeth next, that wee consider how one shall most conuenientlie handle these kinde of woundes, for Thessalus precept, which thinketh these woundes to bee glutinated with medicines called Enema, doeth serue so little to the purpose, that I thinke it more manifest that it shoulde bee vnknowen to anie, hauing his wit, therefore first of all, seeing wee must doe that that the Intestines which are falne out, bee put in againe into theyr place: secondlie, that the wound bee stitched: thirdlie, that thou applie a conuenient medicine, and last to regard that most worthie to be affected.

Goe to now, let vs speake of the first, seeing therefore there is as is sayde, a three folde difference of these woundes in bignesse, let vs attempt to take of euerie of them a proper Indication; admit that in the beginning the wound be so small, that the Intestine which fell out beeing inflated, cannot againe bee put in, whether or no in this, is one of the two necessarie, either to get out the inflation, or to inlarge the wound, the first is better, I suppose, if it may bee done, & thou shalt doe this no other waie than by remouing the cause which brought the inflatiõ, but what cause is that: trulie the refrigeration of the aire ambient. Wherefore the cure must procede of heating thinges, therefore it shall bee conuenient to heate the Intestine with a hotte Spunge

put in hot water, and afterward expelleed out, and in the meane time to prepare auster Wine, made hotte, for that hoeth more heate than water, and strengtheneth the Intestine, but if the inflation of the Intestine ceaseth not by this meanes, thou must cut so much of Peritoneum, as is inough to put in the Intestine conuenient Instrumentes, for this Incision, are Springotoma, (that is to say, such as serue the Incision of Fistulas: Knives which are double edged, or haue sharpe pointes, are to be refused: the conuenient placing of the Patient is, when the wound is made in the lower parte, if he lie vpwarde, and when it is in the vpper partes, if he lie backwarde, in both these one thing is to be regarded, that the Intestine which is out, be not pressed of those that are within, and that shall this waie be done, as if the wounde be in the right side, to bende the bodie to the contrarie parte, if in the lefte, then to the right side, in such sorte, that the wounded parte alwaie bee higher than the rest, and this is profitable also both in great and meane wounds, for that is a common aduise in all.

But the repolition of the Intestines into their place, when as they are fallen out in a great wound, doeth verilie require a perfect minister, for he ought to compasse outwardlie all the whole wounde with his handes, and to presse inwardlie, and to gather together, and to leaue the place bare, to him that stitcheth it, and also to compasse moderatlie that which is stitched, vntill all the wound be stitched.

Now wee will next teach the aptest waie of stitching such woundes in Abdomen, because it behoueth that Abdomen doe close and ioyne with Peritoneum: you must beginne from the skinne, and thrust the needle from without inward, and when as it hath gone through both the skinne, and the muscle called Rectum, leauing that Peritoneum which is vnder it, thou shalt from within thrust thy needle outward by the rest of Peritoneum, and so by the rest of Abdomen, putting the needle from within outwardlie, and when it hath gone all through this againe, this Abdomen

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is to be thrust through from without inwardlie, and when thou hast left that Peritoneum which is vnder, and come to the contrarie parte, thou shalt also thrust this through from within outwardlie, and with all the Abdomen, that is, next after this beginne here againe, and stitching it with the Peritoneum of the contrarie side, and againe putting it through the skinne, next the nædle is to be put in that part inwardlie, and stitching that Abdomen, with the contrarie Peritoneum, and againe going through the skin, and thus againe and againe till it be done, and vntill the whole wound be stitched, the space betwixt the stitches ought to be most smal which pertaine to the keping fast of those parts, which be vnder, but this smalnesse is not sure inoughe to the strength of the skinne, and keepe it from breaking, which is the spaces betwixt the stitches, wherefore eschuing the excesse of both, let vs chose a meane betwixt both, and this also is, as it were a common thing in all wounds, that is, the substance of the thred it selfe, wherewith we stitch, for that which is to harde, must of force teare the skinne, that which is to softe is presentlie broken, in lyke sort if thou doest thrust thy nædle through the edges of the wound, the rest of the skinne being most little, is constrained to teare, when it is violentlie brought together, but if thou goest farre from these, thou leauest much of the skin vnglutinated, and although these things be common to all wounds, yet they are especiallie to be eschued in the stitching of Abdomen, and the stitching of Abdomen ought to be done this waie rehearsed, for if anie doe suppose that he may make Peritoneum to close with Abdomen, but it will scarcelie growe with him, because it is neruous, or else as manie vse, which ioyne them together that be naturallie of affinitie, as Peritoneum to Peritoneum, and Abdomen to Abdomen, and that shal be in this sort, it behoueth to begin of the Abdomen next vs, & from without inwardlie, to thrust a nædle through it onelie, & letting passe both sides of Peritoneum, of the contrarie part, from without inwardlie drawe the nædle through both lips, after put that

backe again, and thrust it from within outwardlie, through the contrarie Abdomen, this waie differeth from the common and vsuall stitching, which at once thrust the néedle through foure sides, because it altogether hideth Peritoneum vnder Abdomen.

Now let vs speake of medicines, fruelie those ought to bée of the same mattier that they are, which are named Enema, which we haue in the bookes going before shewed, to vnite the wound of other partes: ligature outwardlie, is chiefelie héere necessarie: the last parte of the curation in these, differeth much from the other, for the space betwixt the flankes and arme pittes, ought to bée wholie covered with softe Woll dipt in Oyle moderatlie hotte, and yet more sure, if thou put in by a Clister into the Intestines some such like thing, and if ante of the Intestines be wounded, that which is outwardlie to bée done, must bée performed in manner aforesayde, but that which is iniected must bée softer, and red Wine blood warme, and so much the rather, if it bée pearced through to the inward partes. And the thicke Intestines are easilie to bée cured, as on the contrariwise those that bée thinne, bée harde to be healed, yet Ieiunum is altogether incurable, both for the bignesse & multitude of the vessells, and also for that his coate is verie thin and nervous.

Further, because this Intestine receiueth all the pure coulour, and is next the liuer of all the rest. And thou mayst boldlie cure the woundes of the stomacke, which are in the lower fleshie partes, for it may happen to take good succesle, not onelie for that these partes are thicke, but also for that the medicines which doe cure, doe easilie rest in this place.

But the woundes which are in the mouth of it and in Gula, iniove but onelie the medicines which touch them in the going downe, & the sensiblenesse hindereth also the cure of those which are in the mouth of the stomack. But it is easier to trace the way which he vsed in curing of the wounds in ꝑ stomacke, than other deadly wounds, for I take not in

hand

hand to write these workes, for that intent I would not anie man should not reade Hyppocrates bookes, but for that he seemeth to me first to vse a conuenient wate, and yet not wholie to haue finished it, when as certaine things are not yet limited, and we maye finde other which are sette forth of him obscurelie and vnperfect, therefore I haue studied to opin all those things cleerelie, and to make distinction where they were smallie vnided, & to supplie where as wanted. Therefore whereas anie hath first of all exercised himselfe in these our Commentaries, let him applie himselfe to the reading of Hyppocrates Bookes, and let him both reade his booke of Vlcers, and also that which he wrote of mortall Woundes, then truelie hee shall receiue great helpe of these our Bookes, and also shall vnderstand that none of the Methoditian sect, which challengeth to himselfe this glorious Title, but in verie deede bee furthest from a methode, can rightlie cure an vlcer or wound, and also that none of the Emperikes, which thinke to exercise the arte, little knowing the Elements or temperamentes of the similer partes of man, for these knowe not the rationall cure of the similer partes of man, because they onelie take their Indications of the organike members, wherfore a few wordes hetherto vttered, against these Methoditians, of those woundes which happen in the Stomacke, we will conuert our stile to other thinges. Peritoneum beeing wounded, Omentum doeth presentlie fall out, which whether it bee similer or no, or of which it is made, or what action or vse it hath, they doe not vnderstande: therefore it is worth the trauaile, to heare what they will doe, whereas that parte which is fallen out of his place being swart and blacke, whether will they cut it off, or put it againe within Peritoneum? Surelie either they shall vnderstand all together by Experience what is to be done, or else take Indication of the nature of the parte, but both these flyeth from them, both that knowledge which is ministred by Experience while they extoll a methode, beeing the reuerend name of their sect, and that which is ta-

ken of the nature of the part, for that they knowe not his substaunce, nor action, nor vse of it, while they abhorre the Anatomie, as a thing vnprofitable, therefore they know not whether it bee anie of the partes necessarie to lyfe, or else not necessarie, although these are not the least to bee knowen, neither whether through the affect of it, anie of the principle members shall be molested: or otherwise also, whether anie of the vessells or partes within it contayned, maye kill the man by flure of bloud, neyther whether that which is blacke being cut awaie, that which is sound may bee tied, whereby the flure of bloud maye bee eschued, or whether that may bee to anie, daungerous, for that Omentum, euen at the first sight, seemeth nervous, so that one knowe the nature of it perfectlie, hee durst not for feare of conuulsion binde it, but since these wonderfull Methoditians knowe not of these thinges, they cannot tell what is to be done when as Omentum is ware blacke, but I thinke wee knowe, which vnderstand that the vse of it is not so great for man, and that his substance is composed of the thin pannicles, arteries, and veines, we will eschue the flure of bloud, and will not feare by consent, that the nerues shall bee affected, wherefore we will binde the parte that is aboue the blacke, and cut that awaie that is vnder the band, and will forsee that the endes of the band hang in the lower end of the stitching of Abdomen, whereby wee may easilie take them forth when as they are thrown from the wound comming to suppuration.

The fift Chapter.

AND hetherto it is abundauntlie spoken of the other partes of the bodie, nowe therefore there remaineth to speake of the bones, when as to these also, that disease of which wee intreate, doth happen, which wee call solution of vnitie or continuitie, & when as this disease falleth to this part, it hath a proper name giuen to it,

it, in Greeke Catagma, verie vsuall to them that can speake Greeke, for Apagma is the proper name vsed of Phisitions, beeing out of vse to the common people, they vse thus to name it, when as the end of the bone in the part, where it is to be ioyned with another that is broken, but of the fractures themselues, what part so euer of the broken bone, are vtterlie separated, they saie in Greeke that they are named Caulethon, & it is euident that such diuision is ouerthwart, and another diuision made more by the length, in which the partes of the affected bone bee not altogether separated asunder, but are cloven right forth, which kinde they accustomablie do cal Schiducedon. There want not some of the later phisitions, which so ambitiouslie interprete by proper names all the differentes of fractures, that they call some Raphanidon, that is made to the figure of a Raddish, not beeing satisfied with this talke, to saie that the bone is diuerslie fractured, but Hyppocrates was not of this minde, but as neere as hee could, vsing the most accustomed names, refusing not to interpreate by Deation, not onelie these differences of Fractures, but also those which happen in the bones of the head, which if I hadde done also in euerie affect, I shoulde haue made this Treatise short.

Now for that hee hath shewed the waie of manie, which must bee considered, but haue not begunne or defined, what is particularlie to be done, it is necessarie that we tarrie in the no longer than is meete, but repeate briefflie those which he hath set forth perfectlie. And we will also adde demonstration to those, which he hath smallie defended by reason, and wee will define certaine things which are left vndefined, and place them in order which want order, & last of all we wil giue light to these things which are obscure. But if I shall in euerie one adde his wordes, our booke shall be as long as a large Commentarie.

And peraduenture some here will condempne our Prolixitie, when as they shall complayne thereof without cause: In the thirde and seuenth Booke in these it was necessarie to adde manye places out

of Hyppocrates booke De vulneribus, wherby I might shewe other Philitions what it is to write by a certaine methode, the curation of vlcers and woundes: but his doctrine set out in his booke of Fractures; who is so dull that will not receiue it all as clere & most profitable, but if anie man doth saie that he doth a little meruaile thereat. To this manner of saying may most aptlie be repeated, Hos vnum atq; alterum, permit to be sure.

Therefore it semeth good time now, to shew the true method of curing a Fracture, with the nature of the things preferibed, taking our beginning from hence, because there is solution of Continuitie of the partes of the broken bone, their vnion is at the fore first scope, whereto he must bend him that will cure them: but if this same impossible to bee done, because of the dryneslie of the affected partes, there remayneth another scope: that is, that they may bee agglutinated by the helpe of another thing, which thing is a certaine humour, comming betwixt the endes of the broken bones, as it were a Glewe, and so ioyneth them fast together, which if that be found not to bee done, then maie call the affect vncurable: and that fath an harde bone as is in young men, striplings, and men, and much more in olde persons, cannot growe together, I thinke it euident to all men, for truelie that bone onelie will be vnited, which is verie soft, such are the bones in Infants, but some doeth greatlie hope, that the partes of a broken bone separated, may againe bee agglutinated and knit by some other substaunce or glew comming betwixt.

It is shewed that euerie part of the bodie doeth attract to himselfe his owne and lyke nourishment, which if it be true, then surelie the soundest nourishment of the bones is grosse and more earthlie than anie other nourishment in the whole creature: so that it is not repugnant to reason, neyther a thing impossible, that of this same proper Element, which aboundeth and groweth in the endes of the Fracture, maye by his comming betwixt the bones knit them together, for to vse the worth, and

Experience consenteth to that hope which reason doeth geue: therefore it is henceforth to be considered by what meanes this thing that groweth in ꝑ fractures, how much, and what maner a one, may comfort. For it is euident that we require not what maner a one, but such one as obserueth in both, a mediocritie: wherefore, this simentrie, both in qualitie and quantitie, being found out. Furthermore it is requisite to seeke out by reason, whether we may attaine to them both or not: but the time when this shalbe done, is no lesse necessarie to be sought out, whether presently as the fracture is made, shall wee make vnition, as in woũds, or that this be not a time cõuenient, but a more apter must be found, surely, thou being instructed, by the nature of the thing, maist find out this as wel as all other. Therfore what is the nature of the thing? Forsoth the broken bone comprehended vnder some of the rehearsed differences of fractures: goe to now, let vs see whether any thing may be taken of euery difference which serueth to the curation, beginning with that fracture which is made ouerthwart, named Cauledon, the parts of the broken bone, doe here so lie, one besides another, that they lay not directly euen, wherefore it is manifest, that first they be brought directly euen, to that ende they may the better grow together, then todoe some of the things that follow: truely that shall follow if one vsing the example of the whole part, doth draw the bones that are a sunder, to the contrary part, of which is taken most sure indication, of the transposition of them. For truely, it may happen that the trãsposition of ꝑ member shall be made forward, backward into this and ꝑ part. For it is meete, that whatsoeuer are backward, be brought forward, and yet neuertheless, the other part of the broken bone, is to be moderately thrust to the contrary: Contrariwise, that which is forward, is to be deduced backward, & the other part by little and little, to be brought forward. In like sort the consideration of those which are wrested to the right side, is if they be brought to the left side, and againe those which are in the left side, if they be changed to ꝑ right side, alwayes drawing the other part, moderatly

to the contrary: but there is no fatal danger, least in bringing the partes, by contrary motion, some of the shiuers, which sticke out, be broken, neither are both the endes euen as those which are salued asunder, and if they be broken, the endes of the broken bone, cannot exactly be ioyned, and that for two causes, for if the peces fall betwixt the two parts, they let the parts to touch, which are seuered right, or if any fragment falleth outwardly, neither so that there be perfect coniunction of the bones, which thou hast framed in such wyse, as they shalbe like their first vnion, for that onely happeneth when the shiuers of the bones, be put againe in their owne places. And if they being broken doe perish, there must of force be a voide space, betwixt ỹ bones vnited together, in which Sanies being collected, and in space putrifying, doth corrupt also the whole member. And for these causes, the bones which are a sunder, ought to be drawen right out, and this cannot well be done, except first they be stretched backward, the Greekes call it Antithasis, therefore it behoueth to make this Antithasis, of bones, either with thy hands, if the member be little, or with bands put about the member, or else with such instruments, as Hippocrates, hath taught, and when as they haue enough drawen back, and that they be out of doubt, least they in bringing together should touch them selues, then put them right and losen the bandes, and let the muscles of the parts to be in one, and in the meane while helpe thou with thy hands, and if any thing doth leape vp, amend and forme it, and next this, whereto thou must bend, is that the member doth remaine vnmoued, least any of the parts which thou hast placed, be moued, for so of force they must againe separate.

And if thou commit it to the patient, that he loke to the quiet rest of the member, peraduenture waking, he wil regard it. But sleeping truely he wil moue it, but that the bones formed may keepe their situation, not onely the man sleping, but sitting and rising: when the bed is made, it behoueth to binde the fracture, with a safe Ligature, which may exactly keepe the parts of the broken bone together.

But

But for that lose ligature suffereth the bones to moue, that which is to straight by compressing, doth bring dolour, let vs giue diligent heede, that eschuing both discommodities, we maye inioye both commodities, which wee shall doe, if wee eschue extremitie, so that we shall not make the ligature so straight that it compresseth, neyther yet so easie that it bee lose, and if euerie member were of equall thickneese, then the broadest roller were most commodious, because it shoulde embrace all the broken bone of euerie parte equallie and continentlie. But seeing it is not so, although to the breast thou vsest a most broade roller, thou canst not so doe in the ioyntes and necke, but in such, a narrowe roller is better, for that it will not wrinkle, and that it toucheth the skinne of the whole member, about which it is put, but if it holdeth the Fracture with a fewe fouldes, it is not without daunger.

Therefore how much sureneese wanteth through the narrowneese, so much must bee added by often rolling about, and by deducing it towarde the sounde partes, but seeing all rollings which doe constipate and coarct the fleih without dolour, hath that propertie to presse the humours out of the partes where they are first put on, and doth put and fire them in those in which they end, I thinke it reasonable to beginne the ligature vpon the fracture it selfe, and so to procede vnto the rest of the member, for hee that doeth otherwise, putteth the bloud to the affected parte, but if he beginne vppon the hurt parte, and endeth in that which is whole, such ligature shall not onelie be voide of hurt in these, which we haue saide, but be also profitable, for that it suffereth no inflammation to arise about the Fracture, of which principallie regard must be had, and it is to be feared least great inflamations folow, both of the stretching into the contrarie part, which we vse in forming rightlie the member, and also that the causes which make the Fracture, do first hurt the fleih, inuelking the bones by constipation and contusion, neither meruaile I if some such thing

thing, like an inflamation happeneth to the portion of the bones, when as such as are not rightly cured, are manifestlie seene to be more moist than nature requireth, where was ye a wound with a broken bone, neither commeth Caries of the bone, in Greeke named Sphacelos, anie other waie, which is corruption of the whole substaunce of the bone. Therefore thou shalt not bee negligent, but expell thou all the superfluous moisture from the partes which are about the fracture. Therefore thou maist begin vpon the affected part, and bring the roller about twice or thrice, and proceed then toward that which is sound, for verilie he that thus doth roll, shall defend the flure of blood to come from the whole partes, to those which are affected, and doeth also put out from hence that which is heere alreadie collected. Seein then that there are two partes, which maye both receiue anie thing of the affected part, and also send vnto it. For both they which lie vppon it are most readie vnto both, as well for the multitude, as also greatnesse. But the extreme parts for the contrarie cause, can receiue or send but little, neither can minister much, either to the affected partes, either receiue of them againe.

Wherefore when as Hyppocrates made the first two ligatures, with the first he did not expell that was in the affected part, to those that are aboue, and also doth expell that which floweth from them with the roller. For with the first rollings about, which he doth make vpon the fracture, and by deducing it to the lower parte, he thrust some matter thether, and letteth that none shall flowe from thence.

The rest of all the involuings, with which he will haue the roller to goe from the lower partes vpward, that they may in the same place with the first, both repell to the higher partes, and also preserue flure from these, wherefore the two first rollers doe defend and strengthen the Fracture, neither suffer they inflamation to arise. Notwithstanding these alone are not sufficient to both these vses, so that Hippocrates did deuise for their defence a remedie, that splents bee applied with the last rollers, which might also strengthen

then these: and he commaundeth to vse some one medicine, which is against inflammation, least there should follow inflammation, such a medicine is Ceratune humidum. Therefore all these are inuented (as we haue sayd) by reason, and also the figure of repolition, & this also hath a twofold indication, the first dependeth of the common knowledge onely, the other which is taken of the naturall constitution of ỳ members to be cured: the first indicatiõ sheweth that such figure is to be chiefely chosen, which is most frée from dolor and griefe, so that there follow no inflammation to the part, and that the patient be best able to remaine longest in this without mouing. The second indication which is taken of nature, willeth that the arteries, veines, nerues and muscles, be most rightly placed. And these indications doe agrée. For the rightest figure of euery part, is frée from dolor, and that which of the rest is most frée from dolor, is most natural to the part, for to the arme, the figure which is cornerwise in Greeke Eggonios, for the leg that which is somewhat lesse stretched out. Furthermore, not onely the naturall habit is profitable to euery member, not onely in auoyding of dolor, but also the custome séeth much to profit: and this is the waye of finding out the figure, in which the member is to be kept, which also differeth not in séeking out the figure, vsed in extending the parts a funder, called in Greeke Diatasis, and also when the partes of the broken bone, are brought into their naturall place: for it is conuenient that both thou dost extend the member in the most right forme, and that which is furdest from dolor, and also that thou formest it into his naturall habit, and much more that thou roll it in the same figure, and also placing it to rest: for the mouing thereof doth not onely prouoke dolor, but also doth wrest the bones by mouing the member being in one figure, and to change it to another, for except I haue forgotte those precepts which we haue written in our bookes De musculorum motibus, it is necessarie, that whereas the figure is altered, there some of the muscles also be strained, and to be made round as they were contracted, and other to be lose and eolared.

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Therefore of force where they are extended, there they are compressed of the roller, and by the compression doe suffer paine and dolor. And where there is no extention, there the ligature is lose and slacke, and so the fracture wanteth his staye: and for because of all these, we must studie that we doe both extend, and forme the member, and also roll and repose the member to rest vnder one, and the self same figure, and ther is no precept left vnset out, which belongeth to the first worke in Fractures.

Thou shalt (as Hippocrates commaundeth) lose the roller the third daye, least there should arise dolor and itching in the member, vnaccustomed to be so covered, and also that the perspiration of that which is now fixed in the member be not letted, by whose occasion there doth not onely fall thereto, an vnhappy itch, but also the skinne to be vlcerate and corroded, with the sharpnesse of Sanies: wherefore we must poure in so much of temperate water, as shalbe sufficient to take away this Sanies. And if thou wilt againe doe as it is aforesaid, thou oughtest to doe it the vii daye. All things now are apparent, so that nothing hindreth, being free from inflammation, and somwhat gentler, than for naturall constitution. Then it shalbe lawfull to apply splents, and roll it more wider asunder, for it was not without danger, to vse splents before the inflamation was past. But now when as it is ceased, that nede is to strenge then the fracture, surely you shall vse thē with much commoditie. And you may also let the rollers remaine longer time, the partes having no nede to expell Sanies: Furthermore Callus in Greeke or Poron, shal so luckely follow when it behoueth to the generation of it, (as it is afore declared) some of the proper nourishment of the bone to be gathered together and grow. Therefore this is now to be consumed away from the lips of the fracture, or else to be engrossed, for else truely it shall make solution of continuitie, neither shalt thou let it slip, so long time, that thou knowest not how the fracture goeth forward: for we have often seene, that when the bones were vehemently dryed, Callus hardly dyd grow.

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Wherefore it is meete to poure vpon these a little warme water, the third or fourth daye, leauing when as the flesh riseth in a red tumor, and wee must leaue herein, before it beginneth to allwage. Contrarywise, when as we will digest any thing, we shall not leaue of, before all the tumor be vanished which sprong of the perfusion: and whereas the aboundant moisture is, and let that Callus doth not better grow, there we shall go about with cõuenient ligature to exicate, as is before saide, and with perfusion of water, which must be altogether little, or much: for it shalbe but little, when it ceaseth, and before any thing floweth to it: & the humors which be about, be digested, and doth dissolue those which are deepe fixed. For it is expedient so to lose & dissolue these, which are to be expelled by rolling: for a great deale of water doth more digest than attract. Surely it is euident, that in that ligature which doth expell, the endes of ỳ rolles are lesse to be coarcted, but whereas we must nourish, there the endes must be straiter, and the other inuolutings more lose.

Now seeing we haue founde out not onely what time we must helpe the generation of Callus, but also by what maner, now there resteth, to set out the vniuersall order of diet. For in the beginning, they ought to vse most thinne vyet, as we will proue when we take in hand the proper curation of inflammations. Furthermore, we will declare that sometime it shalbe expedient to let bloud, and also to purge, but what time Callus is ingendred, the bodie is to be nourished with good iuyce, which may much nourish, of which there accustometh to follow, not onely good iuice, but that which is also tough, of which principally Callus is made: for seeing that it cannot growe of a serous and thin moisture, & that it can spedely grow, of that which is grosse and brickle, and voide of fatnesse, but yet in time wareth dry, it is made friable, and apt to breake.

The bignesse of Callus, shalbe such, as it were a safe band to the bones, & yet not compresse the muscles, for that Callus which is to little, is not sufficiẽt for the bones, & that which is to great, bringeth dolor to the muscles: so that diligent

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hede must be had to encrease it, if it groweth to little, and to let it if that it doth increse to much. And thou shalt doe these both by the quantitie of the perfusion, and also qualitie and quantitie of meates, and also the facultyes of medicines, which are to it outwardly applyed, but we haue before spoken of perfusion and order of dyet of medicines, and such as haue an emplastike substãce, & do moderately heat, they doe both bring forth Callus, and also increaseth them. But such medicines as haue a digestiue facultie, doe deminish those Callus which are now great, but if thou studiest that neither Callus shalbe encreased, or deminished, but art content to let it grow further, vse thou some of those medicines, which are applyed to greene wounds, which because they doe moderately drye, they cause Callus moderately to coagulate and grow: and this is sufficient touching ouerthwart fractures.

Now of those that are in length, the cure is in all points as the other, but yet the ligature must be straiter made in the fractured place, and that which is a sunder, must be inwardly thrust to those which are diuersely fractured, and chiefely with a wound, as it doth cõmonly happen to these. Hippocrates, willeth that splents bowed like a sawe, and dipped in redde and auster wine, chiefely in sommer be put about it. For if any doth vse either Oyle, or Serot, they doe putrifie, because the affect being greater than the rest, doe more drye than they require to be dryed. And let all the medicines as he commaundeth be drying, but yet considering the meane of excication, he willeth such medicines to be of the kinde of Enema. But if any shall at the beginning vse an Enemon medicine, let it be such a one as is apt to be poured in, and all other thinges are to be done after his precepts, not onely in these rehearsed, but also if the bare bone requireth to be cut with a saw, or that thou shalt take away some fragment, or that it behoueth to minister to nature expelling it, what so euer Hippocrates, doubted of those instruments which the legges are to be layde in, called Solenas, whether they are to be vsed or not, all men doe know that I iudge the reasons laudable, and Glosconum,

which

which is inuented of the later Phisitions, we doe account it as worthie of praise as the other. I doe vse it, when, in the time of engendering flesh. Yet it seemeth ỹ Hyppocrates knew not that, although otherwise he was not negligẽt in excogitating instruments which should be profitable, but the instruments in which the legs are placed, was rightly deuised of them, that by one arultre which was placed in the end of the instrument at the lower parte, causeth by a double extension, a contrarie indeauour to the whole member, & the one of thẽ which extendeth the member right out, is called in Greeke Eutigporos, the other which extendeth it first vpward & afterward backward, is called Translatiue, in Greeke Metaleptice, both are done by bands or cordes, & that band is most apteste to this vse that hath two ends; for this being put about the member, the armes being put about the arultre of it, maketh the first extension, called Eutigporos, and when as the band is put about the parts of ỹ broken member, it maketh the translatiue extension, called Metaleptice, the armes of him being moued first vpward, & after backward, for these are also to be put about the arultre. Furthermore the armes with the bands being put about, & as it were bowed, the extention which is made frõ the higher parts to the lower, ought to be done by the pulley or vice, which are placed in the sides of Glottocomon, thou maist call this instrument Solena, with his adiection, Solena Machanicum, or Glottocomon Mechanicum, but we shal more largelie speake of instruments, whẽ we set out ỹ cure of lurations, where also we will no lesse speake of ỹ varietie of ligatures which are to be put about. Now seeing I haue made mention of Solena Mechanich, which doth much profit the leg, but when it is reposed & otherwise put, or whẽ as the patient changeth his bed or goeth to the stoole, it shal be good, because nothing shal want to ỹ Treatise hereof, to cõmend much Glottocomon, of which they make ỹ one side, & also the table in which they place the foote, to be moueable, for that it may serue to the bignesse of euerie member. And this shall be sufficient to vnderstand of the other fractures, with these which Hyppocrates hath commanded.

The sixt Chapter.

Hippocrates trulie hath writtē a whole booke of those wounds which happen in the head, in which he hath set out all thinges which herein are to be done, & we hauing finished this worke, will goe about to explicate his workes at this present. Trulie for that in these Commentaries we haue added more than he hath spoken, and defined that he left vndefined. It behoueth that we speake first of the hollow cutting instruments, called Cheliscus, next of Phaeotis, after that of narow cutting knifes, and last that we intreate of the vse of medicines, therefore there are some fractures of Cranium, which commeth to the second table called Diploen, some to the inward part of the bones, some are simple fractures, some are contusions, and some the marks of those wherwith the stripe was made, remaine the simple fractures, which come to the second table, those nede the narow knifes before spoken of. It is requisite both to haue many of them, & also differing in bignesse, least y should want which is most apt for the purpose, and the bone affected being made bare, as the manner is, you shall first vse the broadest knife, next another, which is narower, & so the rest orderlie, vntill you come to the narowest, and this is to be vsed in the second tables. Afterward both these, & so to the end it must be cured with drying medicines, which for that cause are called Cephalica, & those are made of Iris illiriaca, and meale of Eruum, and Manna, & Aristolochia, and the rinde of the rote of Panax, and to conclude, all such medicines as mundifie without corrosion, for the generation of flesh is ꝑ worke of nature it selfe, & there the patient in that behalfe hath no nēd of the art of medicine, & that the flesh which doth engender may close, & cleue about to euerie part of the bone, y shall chieflie followe, if there be an filthinesse vpon it, neither yet anie oyle or fatnesse, therefore this one thing which the Phisitions helpe to the production of flesh in the hurt patients, y all the place

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be vile, neuerie part of the affected bone pure, till there are tokens of all fractures, when as the flesh beginneth to growe of the fractures which come to the coates of the braine, if it be onlie a simple fracture, the narow knives before remembred must be vsed, but if the fracture be with contusion, ꝑ which is contused must be cut out, first pearcing it through with Teribles or Trappons, and after with knives, or at the beginning with Cyclisos, as nede doth require. But ꝑ which is done with Teribles, is dangerous, because while they more boldlie vse it, they doe often hurt Dura mater, which is the next bone. Also that which is done by Ciclisos is not without fault, when that it doth immoderatlie shake that which requireth rest. Therfore it liketh me best, if the fractures be greate, & the bones fractured vehementlie, to vse Ciclisos, for with small incision thou maiest make space with lenticuler Excisories, & if the bones be sure and firme, they must be pearced through with a Terible. And certaine because they should not erre, haue deuised such Teribles as cannot sinke downe, and for that cause are named Abaptista, there goeth round about a circle, a little standing out somewhat aboue the sharp end of the Terible. Trulie it is conuenient to haue many such Teribles seruing to the thicknesse of euerie Cranium, for to a thicker Cranium a longer Terible is conuenient, I do cal it so, whose space frō the point of the Terible, & the circle extant compassing it, is longer, & to a thinner Cranium, a shorter Terible: & this also is that which hath a lesse space betwixt the point & the ring ꝑ goeth out. And trulie whether I shal call these more dangerous or surer than the other, but they vse those that are called Checnicidas, but vse thou with good successe Ciclisos, if thou be not skilfull of those things which may deceiue thee, neither yet more fearefull than nedeth, first those that are broader, then those which are narrower, vntill thou come to Dura mater. But that bone which must be cut out, is not to be made bare round about with the Ciclise, but on that part chiefly where the fracture is most grieuous, for besides other, the pannicle it selfe doeth most spedelie separate from the bones that are

vehementlie affected, so that there is no feare of touching it which is alreadie separated, for if thou hast once made one part bare, & settest thy knife, which hath in the end a blunt and light forme of a lentle, which is like a peise, and the edge erected in length, when as you haue set the broade part of the lentle vpon the pannicle, strike it with a mallet, & so then thou shalt diuide Cranium, for doing thus, all things come to passe as we would haue thē, for one cannot wound the pannicle, yea, though he did it slipping, touching it onelie with the broade part of the lentle, which if it doth anie where cleane to Cranium, the roundnesse of the lentle doth without daunger take that awaie, for the instrument it selfe called Lentle, cutting Cranium followeth at his back, it going before, so that thou shalt not finde out anothir waie of pearcing, which shall bee lesse daunger, or yet more spædie. For thou wilt chieflie praise this in most vehement Fractures, which manie of the later Phisitions doe call Lupei foniata, and Camarofeis Lupei fomata are, when in the mindest they indeauour, or to take a peece of the bone forth, the coate or Membrana remaining bare, Camaromata which haue the same part exalted, wherewith he did take awaie the fractured bones from the part affected, are such as most spædelie eut an hole out, when as the ende of the Instrument called Lentle doeth easilie enter in, and those which are farre gone from the naturall habite, we shall prepare with an Instrument called Octagran. Some of the bones which are vehementlie crushed, being lifted vp and turned to that parte chiefelie, that we maye put in the instrument called lentle, which done, all things after that needeth, followe with securitie and spædinesse, that thou mayest almost rehearse that famous saying, in which all things are well, Dimidium facti, qui bene cæpit habet: that is, he which hath begun a thing wel, hath halfe brought it to passe, for heere thou hast not the halfe of the whole, but rather the whole, or elfe but little lesse, when as thou hast put in the Instrument called a Lentle. And this is the best manual tractation of fractures in Crānio, called Chirurgia.

Now

Now I will hereafter shew how much of that is to be cut awaie that is affected, that which is vehementlie fractured, is to be all taken awaie, and if certaine fragments come out further from it, as sometime it is seene to happen, it is not expedient to follow these to the end, being assured that hurt or damage shall follow to them that haue it, if all other thinges be rightlie done, wee doing so not once or twice, but often haue had our desire. And the Indication of doing things, is here also taken of the nature of the affected partes, for the ligature which in other fractures reason hath found out, to keepe backe inflammations, thou canst not vse to the head. Therfore thou canst not staie that which floweth, neither expulse out of the affected partes that is in them contained, without which remedies, none of the other bones can be conserued sound. For imagine that in the arme, the bone is broken vnto the marrowe, and that none afterward doe bind it as it becommeth a Fracture, it must follow necessarilie, that not onelie the matter which is gathered outwardlie vnder the skinne and muscles, but also which is in the marrow, doth both first and principallie corrupt the marrowes it selfe, & also with it the whole bone. Seeing ỹ when all things are rightlie done, this doth sometime chance. How then may not such things happen to the head, seeing that it cannot haue the ligature which is due to Fractures, and also the matter sinketh downe in such sort, as all lieth vpon the coate or pannicle in other Fractures, when it is well rolled, it is so farre, that it suffereth no superfluous moisture to be gathered in the affected bone, that it maketh the member leaner than for his naturall constitution. The waie that is excogitated by ligature, cannot both so exact the fractured bone & the parts about it, ỹ they shall neither be inflamed, or yeeld anie matter, neither is there anie medicine, which in other partes can without ligature, as we haue said, keepe the fractured bone drie, & free from superfluities. Wherefore we had nede first to make bare some part of the Fracture, wherby we may mundifie & wipe awaie the Sanies from the coate, and when the time of inflammation is past, and all is cradlie dre, then to

incarnate and ciccatrize the place. Our talke is not here naked & voide of matter, as the Sophists which knoweth not the workes of the art, do demand why the fractures of the head hath no Callus, they haue (O good sirs) a Callus, and you be so mad that you do assigne causes of that, which are not as though they were: we in times past did see the bone of the fore part of the head broken, which next followeth, this is called Os temporis, in which it happeneth that the commissures are ioyned as it were like scales, in it there was most long and manifest Fractures, which I nothing touching, but cutting out the bone of the fore parte of the head did cure the man, that he now hath liued many yeres, but if I had in like sort let alone the bone of the fore part of the head, the coate vnder it would sure haue putrified, then the fracture to haue engendered Callus, for if no Sanies should flow inwardlie from the affected parts, it shuld haue bene needlesse to haue cut out the bone, therefore they (as their manner is) doe trifle, for I truelie in another hauing the like fracture, did thinke to let the higher bone alone, and to take out that which was in the sides, whereby the Sanies might flow out. But when I did marke both the thicknesse and the hardnesse of the bone, I did iudge it better to take out the bone, than for regard of the figure to smite vehemently the braine, and I also thought ẏ it might happen, that if there were a great hole in the side, that the braine might perchance come to this part. Further, there & that not in one place is in the sides a springing of nerues, and that of no small quantitie, when as in the high bones of the head there neuer springeth the least nerue of all, and I being by these things warned, did abstaine frō taking out the bone that was in the side of the head, and it euer had Callus, and if it were rightlie cured, and now truelie there resteth, that wee seeke out what is our principall scope of all, both medicines, and eke of all our diligence, when as the bone is perforated, whether that which is most delicate, and auerable to the pleasure of the Patient, which now the most part vse, or else that which is hereto repugnant, that is, that which is done by most vehement exiccatiue medicines,

cines, which Meges Sidonius doth praise, and a certaine Citizen of ours doth alwaies vse, insomuch that he forthwith applied to the bare coate or pannicle an emplaister called Iesen, and vpon this outwardlie Drimell, trulie this old man was sufficientlie exercised in this part of the art, but I did neuer see anie other vse them, neither yet durst I doe so. Notwithstanding I can thus much witnes with Eudemus, for that was the olde mans name, they rather escaped which were of him cured, than of those who vsed delicate medicines, and I had also gone about to trie the like waie of curing, if I had continuallie remained in Asia, but seeing I haue bidde at Rome, I doe followe the manner of the Citie, committing the greatest part of such workes to those whom they call Chirurgions. But iudging the nature of the things it selfe, I conceiue that such certaine determination to be confirmed by our experience. The auditorie cunduit which stretcheth not onelie vnto Dura mater, but also toucheth the nerue which goeth from it to the braine, this although it be so neere, doth abide, as it is said, most vehement medicines. Therefore it is no meruaile, if after the perforation of Cranium, Dura mater, before it is much molested with inflammation, doth desire most strong medicines, hauing naturallie as it were a drie substance.

FINIS.

Thomas Gale vnto the friendlie Reader.

IT is requisite that euerie one that vseth this art of Medicine, in the curation of diseases or sicknesses, not onelie to know the diuisions & natures of the same, but also to knowe the names, by meanes whereof, euerie one of the same may be knowen from another, and chiefflie in this part, for the better vnderstanding of Tumours against nature, wherin Galen hath taken great paines, not onelie in their true diuisions, but also gathering together their most apt and auncient names, giuen vnto them by the olde writers. And if anie names did lacke for such sicknesses, as raigned in his daies, he did deuise most apt and conuenient names for the same. Aristotle saith, whosoeuer is ignorant in the tearmes of his art, that he is ignorant in the whole arte. Therefore it is necessarie for those that professe so noble an art as Chirurgerie is, not onelie to know the names of sicknesses and diseases, but the name of euerie perticular medicament, as wel simple as compound. And also to know all other strange tearmes appertaining to this arte. Wherefore Galen in this booke of Tumours against Nature, hath taken greate paines, not onelie in setting forth of their names, but of theyr true diuisions, natures, and dispositions, with their figures, formes, and humours, by which they doe grow and are maintained, without which knowledge no Chirurgion can either rightlie cure, either else vnderstand the nature of those things which he doth take in hand.

Therefore I haue thought it good to set before your eies this most worthie booke, which Galen hath writtē, of tumors against nature, wherein he hath most excellently set forth not onely the most apt names, but also the humors, that the same tumors doe spring of. For like as he hath declared, in his methode of curing, the diuersitie of wounds and vlcers,

with

with their natures, formes, and properties, and also with their accedents, symptomata, and causes. Yea, I say, not onely with these, but also with the knowledge of the temperaments, natures, and qualities of euery medicament, proper for their remedies, with their trew deuisions and names, to that ende, that euery one of them, may be exactly and perfectly knowen from other. And for the better vnderstanding hereof, I haue added in the ende of this booke, of Tumors against nature, an other booke of Galen, of the names of medicines, which be proper for diseases, which I haue thought very meete and conuenient, for you to vnderstand, to that ende, that you may be accounted men of knowledge in your arte, not onely to be accounted so, but to be so in deede. Thus taking my leaue of you, I desire you most hartely, to be studious herein, and so being, you shall incourage me, further to procede, in other things of this arte, which may be much for your profit. And thus I commit you to the almightie Lord, who illuminate you with knowledge, of this most worthy Arte. Your louing brother to the vttermost of my power, Thomas Gale, maister in Chirurgerie. An. Domini, 1563. Mense Septembris, 25.

Claudius Galeni de Tumoribus preter naturam.

OF those things which chaunceth to mans bodie, one thing is that which the Grékes do call Oncos, which we name a tumor or swelling, for so doe they tearme that thing which is a swelling or a distention, in length, breadth, and deepnesse. Also sometime that bignesse which is aboue natures constitution, they do cal Oncos. These do not onlie chance vnto them that be sicke, but to those that be whole also. For corpulent persons, and women with childe, are more bigger in breadth and thicknesse than according to nature, and yet they are not affected against Nature, as we haue sayde in other places. The other tumor is that which is according to natures constitution, (or as we may tearme it, a naturall tumour in the braunes of our armes, and caule of our legge) which is in a meane betwixt those that be according to nature, and those against nature. For corpulent bodies & also leane bodies, are not against nature, but the one is aboue natures constitution, and the other vnder, and so both these dispositions are called not naturall. But that tumour which cõmeth of the dropsie, and leanes in a consumption, both these are against nature. But now in this present booke we doe purpose to intreate of those Tumours which bee against nature, which doth not onelie occupie the whole bodie, but also may chaunce to anie part thereof, so that it bee alwaies determined, that the agreuation of this vnnaturall constitution be against nature, and the end of the same to be the hurt of the naturall action. But we nede not to

speake

speake much of these Tumours, for that they be commonly knowen vnto all men, not onelie to the Phisitions, but to all other persons.

The other tumours which groweth of immeasurable fatnesse, and flesh, and also women beeing with childe, doe make those which are aboue natures constitution. And we considering all other Tumours, which are according to nature, and necessarie for the making of our bodie, (as in the braunes of the armes, and cause of the legges, &c.) All other tumours which doth exceede that, which is aboue nature; and those which be naturall, we account against nature. And taking our beginning at the first of them, called an inflammation or Phlegmon.

Of Phlegmon or Inflammation. Chap. 2.

THe Grecians vse to call that an inflammation, which commeth with great tumor or swelling in the fleshie parte, strained and stretched forth, resisting with pulsation & dolour, hot and red. The cause of these accidents, is not onelie vnknowen to ỹ multitude of the common sort, but also vnto manie Phisitions, (or as we terme them, those that vseth the art of Medicine) for diuerse of them, not seeking out diligentlie, doe simplie pronounce that which seemeth good vnto themselues, mistaking the thing. But consideration must be had herein, if you will proceede in this mattier. Therfore there is neuer anie great tumour that chaunceth in anie parte of the bodie against nature, except the same parte be affected with one of these two thinges: For either it is made flowing, increased, and stretched forth through ouer much hotnesse, either else it taketh some new substance outwardlie. And when this feare doth happen, & is stretched out with swelling, it is tourned into spirites, and beeing refrigerated, it doth easilie tourne againe into his accustomed swelling.

But

(But wee se no spirits in the inflamed parte) neither yet the part inflamed being refrigerated, does not alwaies come a gaine into their former constitution. And it is manifest by incision also, that there is no spirites therein contained, for if the inflamed part be cutte, much bloud will runne out, and all the place seemeth euidentlie full of bloud, like vnto a wet Spunge: But yet you shal se no spirits come forth, either presentlie or yet long after, and the colour of bloud is altogether inseparable. There is no part of the bodie that is red, but bloud and flesh, neither is the multitude of flesh the affect of inflammation, for although the multitude of flesh be in the bodie without multitude of bloud, yet the tumour trulie shall be bigger than natural, and the colour shall be healthfull, and not swarue from his accustomed nature: for in anie thing which naturallie increaseth, the colour is not augmented, for then should Snow be made more white, Pitch more blacke, and Golde more yeolowe. And the increasing of substance differeth manifestlie from alteration, for thinges increase according to their quantitie, and altereth according to their qualities, but colour sheweth the qualitie of ỹ substance, and not the quantitie: Therefore the multitude of flesh differeth from an inflammation, and for that cause, the bodies which abound with bloud, bee most troubled with inflammations. Now, seeing that sometime in wounds there be greate inflammations, and yet there floweth forth thin and watrie humours, the place it selfe round about it appearing red, it is therefore herein, that the thicknesse of the flesh or member wherein the wound is, to be of a mediocritie, and not vnnaturallie swelled, that it may suffer the mattier more easilie to come forth, and that it may the more easilie containe the bloud, which is necessarie for the nourishment hereof: But you shall vnderstand, that mattier or Sanies, how much it is more thin than bloud, so much it is groser than spirites. Wherfore if the wounded flesh doth permit mattier to flow out, it must of necessitie suffer spirits to passe forth also. And so these spirits being enacuated, the tumor and inflammation should cease, for trulie it so happeneth often times, in

those parts, whereas spirits are aggreuated, the parte once cut, all the tumor vanisheth.

The generation also of inflammations in wounds, is a witnesse thereof, for in the beginning, when woundes are new, there floweth multitude of bloud, which being stopped with things refrigerative, or else the mēber it self beeing refrigerated, it is staied. It is also staied by compression with our hands, or with ligatures, the bloud being concealed in the edge of the cut part, and so retained, doth ware thicke as it were a clod, or as we may tearme it, a coniealed thing, for they onelie differ in this, that the clod or concealed bloud shuld be a sensible concretiō of bloud, gathered together in the wounds staied in the small passages of the cut partes, making the bloud grose. And when the bloud is grose, and the sides of the cut part more straight, the bloud is retained, and the sanies put forth. All these be the greatest coniectures, that the inflamed part abound with bloud, and that the heate should be more than natural, but yet not so hot, that with heate onelie without flowing and stretching, it should make such a tumour, for hereof are manie considerations to be had, for then in burning Agues, howe much the heate were more vehement, so much the greater should the tumor be in the inflamed part. The second coniecture is taken of the substaunce of the bloud, for it is not concealed of colde, as Pitch, Rosen, and Ware is, but is alwaies by nature more hotte. For those when as they are made hot, they turne to the contrarie, and become thin, but bloud by nature being hot, the tumour may well be somewhat greater, but yet not so much, by the reason of onelie heate, to raise vp anie great quantitie in the inflamed part, but Pitch, Rosen, and Ware, comming to so much extremitie of heate as both the inflamed partes, they are made some thing bigger, and these things being considered, beside that which we haue spoken, is no small coniecture, that the tumour of the inflamed parte, commeth not onelie of flure, for there is no small alteration in the heate of the bloud, which causeth the tumour to be bigger. And let that which appeareth to be, to the an apt coniecture.

For

For in bloud there is not as in pitch, rosin, and wax, being vehemently made hot great confusion, but it keepeth, being boyled on the fire, his accustomed tumor, or is very little increased. And I haue declared aboue, that inflammations, being refrigerated, the tumor did not alwayes cease, for a vehement and great inflammation, in which there is a flux impacted, although you doe vehemently refrigerate it, yet you doe not seate the tumor, but make the part of a leadie coulour, and turneth the affect into Scirrhus, by the reason of the cold medicine. And some inflammation as we haue sayde before, which hath a flux ioyned with it, may easely be cured, with things which doe refrigerate, and be astringent, & chiefely, when it is little. But the flux, being firmely rooted, (or as we may terme it confirmed) then neither astringent, nor colde things helpeth, for it doth require the euacuation. Therefore, the auncient Phisitions, inuented medicines, not onely to discus, dissolue, & driue away with their hotnesse, but also did inuent to scarifie the skinne, and so to euacuate the bloud sensibly.

All these are great tokens, that the inflamed parts, are full of bloud, and yet this inflammation, is not presently at the beginning, but by proses of time, the powers being stopped, and perspiration letted, this is brought to passe. Therefore of necessitie, the bloud so remaining, it doth putrifie, for all things hot and moist, gethered in hot & moist places, doth redely putrifie, if they be not spedely, euacuated, either else refrigerated. Wherefore, if the heate, which commeth of putrifaction, surmounteth that which it had before, that is easely knowne, by the inflamation of the part, and the bloud gathered vnto the tumor. Notwithstanding, although the veines, which for their littlenesse, did not appeare at the beginning: yet then they will appeare. These commeth not onely of inflammation, but also because they are filled with bloud.

Therefore they come to that bignesse, that they may be most manifestly perceued, and that chiefely in the eyes, priuie members, and womens brests, and that the flesshe, who being inflamed, seemeth to abound with bloud, both the coulour,

lour, and the tumor doth declare the same. Wherefore all the flesshe is compared like vnto wolle, or a wet spunge, which you may more perfectly vnderstand, when the matter commeth forth, for then the inflamatiõ hauing passage, the truth is perceued.

And I truely suppose, the skinne to be distended, and lifted vp, with those humors that are gathered together in the tumor, and in time, the tunicles and vessells, which be vnderneth, taketh some part of the flux, like as the vpper skinne doth, which couereth the inflamed part. Yea, also the nerues, and tendons, by proues of time are inflamed, and some time the disease commeth of these, as they chaunce to be wounded. But yet vniuersally, there is nothing according to nature, in the inflamed parte, when as it hath long remained so, for the flesh, with all the rest, is infected with the flux, in so much, as some times it commeth to the bones. And some time, ỹ same affect it selfe springeth of the bone, but the matter being auoided, the skinne is made loser, whẽ that which was betweene, is runne forth, as we haue sayde in the administration of the Anathomie, and chiefely, where we haue made diuisions, or declaration of the arteries. But where there be inflamations, all these parts are filled with blood, flowing out of the vessells, which are dispersed into euery part of the flesh as it were a dewe.

Of Apostumes which commeth to suppuration. Cap. 3.

When as through proues of time, nature getteth the victory, then is all the flux concocted and turned into mattier, and so put forth of the fleshie part, by the expulsiue vertue, which doth cast forth hurtfull things. Therefore, where as there is any manifest hole, as it were a conduit, prepared for the excrementes to be purged, this place being open, part runneth out, by pus or matter, and part doth breth out sensibly. But where the skinne which couereth the apostume, is grose and hard, such is the skinne in the vtter parts of ỹ bodie, ther the matter is stil retained,

and

and doth diuide the vpper flesh from that which is vnder it, and so in processe of time, by his acrimonie and sharpnesse, it corrodeth through and runneth forth, if that by scarification it be not preuented. But oftentimes it commeth to passe, nature being ouercommed of the flure, that the blood is not tourned into mattier, but into some other certaine mutation, sometime into one, and sometime into another.

The auncient Phisitions doe commonlie call all these by the names of Apostumes, and principallie these which be in the profound and deepe partes. But many would not haue all these which tourne into good mattier be called by the name of Apostumes, but onelie those which tourneth into corruption, like as they call all these which come to suppuration in the lungs, by the name of Impiema, and other some Diapiema, and also like as Impielbem, and Dimpestem, and manie would not haue them so called. But when there is anie such thing amongst the little pannicles, that they call Empyema, and him that is so grieued Impius. But some other Phisitions would haue those called Impius, in whom there is mattier gathered betweene the breast and the lungs. Wherfore I haue said, we must so far forth regard the names, as the thing signified may be made more euident. For we must labour that ỳ thing it selfe of which we do speak, may be made so manifest, that no part therof be left vnknowen, for all these are preparatiues to the methode of curing, by which methode we doe cure the dispositions themselues, and not their names. Therfore you bearing these things in remembrance, we will procede vnto those which remaineth, and are necessarie to be spoken of.

Of Sinus or hollow Vlcers, and the cure, when it is difficill and hard. Chap. 4.

When as putrefactiõ doth separate one part of ỳ body frõ another, or separateth those things ỳ be contayned to their subiects frõ the same: this mattier being euacuated or let forth, so that the parts separated cannot

not take their accustomed constitution and vnition, this affect is called Sinus. And if this be not spædelie cured, there doth growe a certain hardnesse by length of time, which is named Callus, neither can it be adglutinated to the parte subiect, but by conuenient dyet, and medicamentes which bee exiccatiue, for other wayes the parte shall seeme to inioye perfect health when it is not so. For if anie man vseth a right diet, and hath his bodie free from superfluous humours, Sinus is remoued and chaunceth not. But if the bodie doe abound with superfluous humours, the same may resort againe to the grieued part, and cause the same Apostume which was before, which might haue beene easilie euacuated. Then you must cure the same as you dyd before, with abstersiue and clearifying thinges, and medicaments that may keepe back humours. But this Apostume shall not be so grieuous, by a great deale, as the first was, for so much as the partes which were diuided, are not ioyned together againe, and that the humour doeth quicklie and spædelie fill the same, insomuch, that Sinus (as we may tearme it) doth easilie receiue the flure againe, and as it doth quicklie receiue it, so doth it spædelie euacuate ỹ same, hauing an apt waie for the flure to auoide at. But if the partes were adglutinated and ioyned together, then the Apostume would be grieuous before it were broken. The generation of an Apostume commeth not onely of an inflamation called Abscessus, but sometime also it commeth by the meanes of other humors, which by processe of time corrupteth & separateth the parts ỹ were ioyned together, frõ their subiect partes. Wherefore it commeth to passe, when these Apostumes be cut, that there doth not onelie appeare in them all kinde of humours, but also sound bodies, and straunge things, for there are sometimes found in these Apostumes, things, like vnto mier or dirte, to vrine, to congeled things, called Grumos, iuyce of Honey, slime, bones, stones, nayles, and haire, and some time like liuing things, all which, doth spring of putrifaction, as it may easely be perceaued.

Of Fistula, Atheroma, Steatoma, and Meleseridis. Cap. 5.

There is also a narrow, and a long Sinus, which is called Fistula, and is cured like as the other Sinus is, and commeth againe to apostumation, through the superfluous flux of humours, euen as we haue said in the other. Atheromata, Steatomata, and Melesirides, are of some men, accounted among Apostumes, and some suppose, them to be of an other kinde, but the natures of them, are manifest by their names.

For in Atheromata, is things found like vnto potage, or like to a pultes. In Meleserides, like vnto Honey. And in Steatoma, like vnto fat or suet, and all these for the most part, are conteined within a Membranus filme or skinne, and are called tumors against nature. Besides these, there are other, as Carbunculus, Gangrena, Herpis, Erisipelas, Scirrhus, Oedema, Cancers, and inflamations, all which the Phisicion that doth intend to cure them, must not be ignorant of, but he must be diligent in considering their differences, as well as of their generation and substance.

Of Gangrena and Carbunculus. Cap. 6.

When the blood of Gangrena and Carbunculus, doeth ware so vehement hot, that with inflamation, it burneth the skinne, then they come with crustes, and blisters, and goeth before the vlcer, like as it were brent with fire, and they bring with them, most sharp feuers, and perill of death. These vlcers in a Carbuncle, doe alwayes appeare blacke, or else in coulour like ashes, but not as an inflamation, for the coulour of an inflamation is red, and these decline somewhat more to blackneſſe, then those doe which be of blood, or those which be refrigerated with colde. For those tumors are more swart, but these are glistering like vnto bitumen, or pitch, in so much,

as

as they come of black cholar, for the malignitie that is in Carbunculus, springeth thereof. Therefore, it must needes follow, that from the beginning, either else in the vehement boyling, the bloud be presently turned into melancholike humor, by the reason of vehement adustion.

Of Cancers. Cap. 7.

OF black choler, without boyling, (that is to say, melãcholie) commeth Cancers, and if the humor be sharpe, it maketh vlceration, and for this cause, these tumors are more blacker in coulour, then those that cõmeth of inflamation, and these be not hot, but the veines in these, are both more fuller, & more distended forth, then those which be inflamations. For lesse matter goeth out of the veines, into the fleshie parts, which compasseth thẽ about, through the grosenesse of the humor, which breedeth the Cancers, neither yet are the veines so red, as they be in inflamatiõs, but sheweth them selues according to the humor, that they be filled with.

Of Gangrena, which commeth after great inflamations. Cap. 8.

THere followeth after great inflamations, that which is called Gangrena, and this disease is a mortification of the affected part, and if it haue not spedie remedie, the greeued part doth vtterly perish, and some time it taketh hold of the other partes which be toyned to it, and killeth the man.

For the mouthes of the veines, and all the powers of the skinne, are obstructed and stopped, through a most vehement inflamation, and the natural perspiration, being depriued, the affected parts are easely brought to Gangrena, & mortificatiõ. And first of all the flourishing coulour of these parts, which are infected with inflamatiõs, are extinguished, then the dolor and pulse doth cease, not for that, the evil dispositiõ is al waged, but because ỹ sence it selfe is mortified.

In great inflamations, the pulse, and sence, is not seperated, for the auncient writers doe say, that there is a sensible motion of the arterie, in the inflamed parte, whether it be with paine, or without. Therefore in accidents of inflamatiõs, some suppose, that it must be without paine. But this controuersie is about the name, which is no great matter, for it is better for vs to know the generation thereof, not regarding the name: For in bodies according to nature, the motion of the arterie, is sensible to vs without paine, but in inflamations, it is sensible with dolour and paine. For the arterie when it is delated, smiteth the bodie, which is next about it, & with the beating thereof, we feele paine, by reason of the inflamation. And when the filme, or pannicle that couereth the arterie is inflamed both the arterie which beateth, and also that which is smitten, doth double the paine, and thus of these, we haue spoken sufficiently.

Of Erisipelas, Herpis, Oedema, and Syrrhus. Cap. 9.

NOw wé intend to speake of choloricke flures, and it hath growen now of custome amongst the Phisitions,

I know not by what meanes, that whether we name choler simply, or cholericke humors, we vnderstand it to be yelow, pale, and bitter choler, and not sharpe, and black choler, for they name that with an addition, ioyning the colour of the humor with the name.

Therefore, when any cholerike flur, which we do name exact choler, chaunceth to rest in any place, it doth vlcerate the skinne, but when it is mixed with watry humors and bloudie, it is of lesse sharpnesse, and causeth the part greued, rather to turne into a tumor, then into an vlcer, and this tumor is called Erisipelas, and that which is vlcerated, is called Herpis, these are knowne, bothe by their coulour, and by their heate, which sheweth the humour that they are ingendred of. Againe, according to the sharpnesse of the humour, they doe differ, for that which commeth

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of the sharper humour, is called Herpes Estiominon, for so doth Hippocrates name it. But of the other which is lesse sharpe commeth Herpes milaris, which many haue called so after Hippocrates, because it maketh risings in the skinne like vnto the seedes of Milium. It seemeth vnto me that this flure hath some fleame mixed with it, and that the other to come onelie of exact choler, and therfore it commeth with erosion, the affect apprehending still the skin, whereof it taketh name. And where bloud and choler is equallie mixed together, the forme and nature of it is in a meane betwixt Erisipelas and inflammation. But if either humour exceede in quantitie, the disease taketh his name of that which doth abound, as they call that where choler doeth surmount bloud, Erisipelas inflamatorie, and where bloud surmounteth, they call it Inflamatio Erisipelatas. The like interpretation is also vsed in the mixing together of other humours, as Inflamatio Sirroidis, and Sirrhus inflamatori, and Oedema inflamatori, and Inflamatio Oedematosa. These foure are they which oftentimes are made affects, and chaunceth through the flure of humours, I doe meane Phlegmon, Erisipelas, Oedema, and Sirrhus. Erisipelas is a cholerike flure, and commeth of cholerike humours. Phlegmon, (or as we tearme it,) an inflammation, commeth of bloud. Oedema commeth of thin and watrie fleme. And of grose and glutinous fleame springeth one kinde of Sirrhus, and the other kinde of Sirrhus commeth of the dregs of bloud.

There be also two kindes of these, after Hippocrates, and both they come of blacke choler, which we call melancholie. Of the one springeth Cancer, and of the other commeth a kind of Sirrhus, but it differeth in coulour from that Sirrhus which commeth of fleame, and both these are named Tumors against nature, they are hard and without paine, and the generation of them both, sometime from the beginning, doth come of the ill curing of inflammations, as well in Phlegmon, as in Erisipelas and Oedema, when as they are too much refrigerated.

Of Ecchymosis and blackneſſe which commeth after bruſings. Chap. 10.

Thoſe which are called Ecchymoſis or blackneſſe, be verie nére in kind vnto Sirrhus, and it happeneth chiefelie vnto olde men, when as their veines are bruſed. For of a light occaſion this commeth vnto aged men, as I haue ſaid before, and ſome of theſe colours are in a meane betwixt blacke and redde, and are called ſwart. All theſe come of bloud ſhed out of the veines, ſometime when the filme or pannicle is bruſed, & ſometime when the end of the veines are opened.

Of Aneuriſma and Spaſelus. Chap. 11.

When there is an orifice made in the arterie, that affect is called Aneuriſma, and it chaunceth when the arterie being wounded, the ſkin which is a boue commeth to a ciccatriſe, but the ſeparation which is in the arterie remaineth, being neither conglutinated, nor brought to a ciccatriſe, neither yet ſtopped with fleſh. Theſe affects are chiefelie knowen by the pulſe and beating, which the arteries doe make. And alſo all the tumour baniſheth awaie when the arterie is preſſed downe, the ſubſtance which made the tumour, runneth backe againe into the arterie, when it is ſo compreſſed downe, which ſubſtaunce of bloud we haue ſhewed more at large in another place, to be nothing elſe but thin yeolow bloud, mingled with ſubtill ſpirits.

And trulie the bloud which is in them, is more hotter than that which is in the veines. And Aneuriſma comming by reaſon of a wounde, caſteth forth bloud in ſuch a ſorte, as maye hardlie bee ſtayed. But in Oedema the matter is not ſo, for if wee preſſe the affected part with our finger, it giueth place, and there remaineth a hollownelſe, neither is there anie pulſe felt in this affect, and Oedema is more broader a great deale than Aneuriſma, except ſome

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concealed blood ingendered of Aneurisma, which maketh Spacelus, for so doe I name all corruptions of the sounde partes, so that it is not onlie in the flesh, but also it corrupteth the bones themselues.

Gangrena is also a mortification of the sound bodies, but it is not so of the bones, & it followeth after great inflamations, and is one kinde of Spaselus or Syderatio, and hath a proper and peculiar name beside the general. Now that we haue sufficientlie defined these, it is time that we speake of melancholie sures or tumors.

Of the setling of Melancholy. Chap. 12.

When as blacke cholar lieth in the fleshie partes, being verie sharpe, it eateth through the skinne, and maketh an vlcer, but when it is not so sharpe, it maketh a Cancer without vlceration. And we haue declared before, how that the veines swell more in this tumour than with an inflamation, and what manner of coulour it maketh. There are not onelie Cancers engendered of this tumour, but many other tumours consist of the same humour. All these bodies which are vexed with these affectes, are nourished with the euill iuyce, either of cholerik or melancholik things, either else of some virulent and naughtie humours comming of great putrefaction or corruption.

Of Phagedena, Scabie, and Lepra. Chap. 13.

Those vlcers which eateth and deuoureth the sounde partes about them, are called Phagedena, for they name Phagedena, compound of two things, that is to saie, of the vlcer it selfe, and of the tumour ioyned with it. For Herpis also eateth that which is about it, but it is onelie an vlceration of the skinne, and Phagedena doth not onelie eate the skinne, but the flesh also which is ioyned to it. Now to name other Vlcers, as Telephia and Chironia, &c. it were superfluous, for it is sufficient for vs to call all Vlcers commonlie Cacoethæ, that is to saie, malignant.

Also Scabies and Lepzosie be melancholie affectes of the skinne, euen like as the same humour maketh a Cancer when it is in the veines and fleshie partes.

Of Elephas, named Elephantiasis. Chap. 14.

ALso Elephas is a melancholike affect, and hath his generation of melancholie bloud, and in time the bloud is made mozе blacke, and manie of these are full of blcers, which are of euill smell and grieuous to beholde, and when this affect spzingeth first, it is named Satyriasmon, because they are like Satyzes in countenance. And we do call them so, when there appeareth risings of the bones, in the temples and other parts of the bodie. Also there are such bone risings, which are named Exostosis, like as the natural distentiō of the yard not ceasing, some name it Satyriasmus, and other some call it Priapismus.

Of Achoris, Myrmecia, Acrocordon, Psydrax, Epynectes, Furunculus, Bubo, Struma, and Hernia. Chap. 15.

THere is also a little vlcer in the head, which you must coniecture to grow of salt & nitrous fleame, and out of it floweth mattier, not verie watry, neither yet so thick as honie, oz as it doth in those which are called Faui, foz those are with a certaine tumour, and full of holes, and as it were with an humour flowing like vnto Honie, and these Tumours are verie little, and not lyke vnto the other. And there are lesser Tumours against nature than these, which also happeneth vnto the skinne. Myrmetia, and Acrocordon, Psydrax, and Epinictes, bee affectes to all men knowen, and so is Furunculus most manifest, and it is gentle, beeing onelie in the skinne, but if it bee deepe in the fleshie partes, it is malignant, like vnto Phyma, and Furunculus differeth from Phyma onelie in hardnesse, both these affectes are inflamed, beside the third which is called

called Bubo, the fourth, which is named of many men Phigethlon, doth differ from Phyma, both in heate, and quickneſſe of generation.

There be ſome alſo which chaũceth onely in the flanks, and arme pits, which ſome ſuppoſe to be Phygethlon, becauſe it commeth with an inflamation, in thoſe glandulus parts, theſe affectes, when as they are made hard, are called Cheeras, that is to ſaye, Struma, like as the hardneſſe of the teſticles, are named Sarcocele, and like as the watry humor, gathered in the purſſe of the teſticles, is called Hidroſile. In like maner, when Epeplon, which we call Surbus, falleth out, the diſeaſe is named Epiploſile, and when both theſe, that is to ſay the inteſtines, and Surbus falleth downe to gether, it is named Enteroepiploſilen, the later Phiſitions call all tumors of the teſticles, by the name of Cele, that is to ſay, harnia, or ramix. And like as all that is now ſpoken, ſheweth the ſickneſſe of thoſe parts which we haue ſpoken of, ſo Cirſocile, being a newer name, ſheweth the affect of which it was now deriued.

Of Varicis, Rupturies, Inperitoneum, and Hidropſie. Cap. 16.

VAricis, the aũcient writers, name all veines which are delated and ſwelled, & not as the Athenians ſuppoſe, that Varicis, ſhould be onely in the legges, by the reaſon of their weakeneſſe, and chiefely when the bodie aboũdeth with groſſe bloud, which may fall vnto them.

Alſo the inward rimme of the belly, called Peritonium, either being wounded, or ruptured, and not ioyned together againe, cauſeth a ſoft tumor in that place, which if it chaũce in the flancke, it is named Bubonoſile, but if it happeneth in the nauell, many Phiſitions call theſe Exomphalos, and there is no ſuch diſeaſe of Peritonium, but of neceſſitie, the Naruus apendix of the muſcle, muſt ſuffer.

What this apendix is, I haue ſhewed in the adminiſtracion of the Anathomie. Therefore theſe affects are of the ouerthwart muſcles, that Harnia which is in the flãckes,

is of the oblike muscles, the filme or apendix of those which are in that parts, being either broken or dilated with peritonium. There are also other tumours, which belongeth to this place, that commeth by the hart of the intrailes, the affectes which ingendreth these tumors, are spoken of amongst inflamacions, and other Sirrhus tumours, with other like, as those that haue dropsies, where there is gathered a multitude of water, as in that which is called Ascitis, and of winde, which is named Timpanitis, and that which cõmeth of flegme, which is called Anasarca, or Leucophlegma, &c.

Of Epulides, Parulides, Thimus vua, Tonsilla, Parysthmia, Polipus, Vnguis, and Staphe-loma. Cap. 17.

There are also, other tumors, which haue proper names, as Epulides, Parulides, Thymus, and such like, which are fleshie braunches, or buddes, growing forth, like vnto a graine. Vua Paristhmia, and Tonsilla, are nothing else, but inflamaciõs. Vua, is an inflamacion of Gurgulia, which we call the uuila. Tonsilla, of those kirnells, which be oppolite (wée name them the Amigdalines) Paristhmia, is in ỳ parts of the iawes, or nigh vnto ỳ throate. It semeth, that of these parts Hippocrates dyd not vnderstand all these inflamacions of Gurgulia, to be Vua, but one onely kinde, in which, the ende of Gurgulia is like vnto the sæde of a Grape. Also Polipus commeth when as either inflamacion, or Phyma, or any braunch thereof, call it what it please you, for this affect, is alwayes in the nosethrilles, & they are inflamed, chiefely because of the place. Encanthis, is also a tumor against nature, & brædeth in ỳ corners of the eyes, but yet in all his kinde, he is not against nature. Vnguis, is also a braunch, growing outward in the eyes, to the tunicle or membrana: which is dilated of Sircumossale, and cõmeth to corona. Those ỳ are called Staphiloma, some onely by position, some by disposition, be against nature. We haue in an other place, spoken of all such affects, as are in ỳ eyes, & therefore now it is time, to finish this boke, seing there is no other kinde of tumors against nature, which we haue not spoken of.

FINIS.

AN EPITOME VPpon Galens three bookes

of naturall Faculties, very necessarie for the Students both of Philosophie and Phisicke: set forth by Maister James Silvius, Phisition.

THe Aculeus is certaine rude Effentrix, placed in the temperature of a parte, in the beginning of Simples.

The faculties governing our bodie, in the which our life consisteth, are in number three, Naturall, Vitall, and Animall.

Intime Nature

1. Naturall, is in the liver dispearsed by the veines into the whole bodie, being the third and lowest.
2. Vitall, is in the heart, distributed by the arteries into the whole bodie, being the second and meane.
3. Animall, is in the braine, and carried by the nerues into all parts, indued with the sence of feeling and voluntarie mouing, being first and chiefest.

Indignitie, place and fortitude.

The most first intreate of the naturall, as the nourisher and piller of the rest, as we proued in the order of reading or teaching Galens bookes.

The naturall faculties which bee first & principall, are

Generatrix,
Engenderer
Auctrix,
Increaser,
Nutrix,
Nourisher,

which are called powers Vegitable, Arist. de animal. lib. 2. cap. 4.

1. Actiue,

The first two faculties,

1. Actio. 1. The verie motion active to a substantiall forme by Materia, or preparation to substance, or proceeding to forme. And that is either of all or of part, as generation of humours in a living creature, of blood through moderate heate: of both kindes of choler by immoderate heate, of flegme and melancholie humours, by a flowe heate, and that commonly of some meate more, or some lesse, in all temperatures. And these humours are either naturall or unnaturall.

2. Opus. 1. A thing made and finished by action, as all parts the bodie fashioned in the wombe, and by generation complete, unto the which perfection of partes, the seede being rightlie once conceiued: Generatrix, is the chiefe and principall worker.

Two other faculties,

1. Alteratrix. The which generallie be hot, colde, moist, and drie in their first and elementall faculties, and doth change the seede blood, & menstruall substance into a man, in which is the qualities of feeling, tasting, smelling and seeing: for it is necessarie but of Alteratrix, bones, veines, nerues, and all other partes be made, but particularlie she doth worke upon that substance, by faculties, making bones, nerues, veines, &c. For of the foure elements mingled, doth grow the particular faculties alteratrix, whereof is made the substance of euerie similer parte: and so many faculties of alteration, they be in liuing creatures or of planets, as there are found similer parts in them.

2. Formatrix. This facultie verie artificiallie and with great cunning, and for some cause, doth fashion the matter which is chaunged, so that it may haue an apt figure, for placing, composition, hollownesse, wholenesse, soundnesse, Apophyses, Epiphyses, and other things necessarie, pertaining

to

to the constitution of the bones, narues, veines, arteries, &c. The which constitution is made, for the action and vse of the parte, that after shalbe created, that nothing be lacking, nothing superfluous, which otherwise might be in better sorte.

Auxiliares, or helping faculties as they were handemaides.

Nutrix. Nourisher.

This doe not onely serue for the increase of the young, being once ingendred, but also from ỹ time, that the sede is conceiued, for it is meete that the sede be augmented by nutrition, that it may suffise to constitute, so manie and such parts as be necessary. The male sede is first nourished with the female, and afterward with a small & halituouse portion, of the blood of menstruum.

Auctrix. Increaser.

Facul. auctrices nourishers.

1. Actio. Is an increasing, that is to saie, an ampliation of the sound partes (which were engendered) of a liuing creature, in length, breadth, and depnesse, keping the proper forme and first continuitie, as it is sayde in the 1. li. cap. 5. De generatione.

This is the worke of nature onelie, when as these things which are extended to vs, or pulled from vs, or are amplified in one measure onelie, or not in all together, then this facultie beareth rule from the birth, vnto the flourishing age, and as I saide, helpeth the facultie Generatrix in the wombe, and is onelie in a liuing bodie.

2. Opus. The small partes of a liuing creature borne into the world, which are brought into a reasonable bignesse, and the bodie being little made great.

Auxilia-

Auxiliares or helping faculties,
- Alteratrix, Thaunger.
- Coctrix, Digester.
- Nutrix, Nourisher.

(Of ỹ which we will intreate heere, after more at large.)

Facul. nutrices.

1. Actio. That is nutrition or the perfect assimulation of nourishment, with the thing nourished, that is, when that thing which floweth, as the forme of nourishment is put vnto, fastned, & made like vnto all the sound parts of the nourished bodie, without anie ampliatiō, for the iuyce or humor when it falleth a Vasis, euen as certain dew, so is it dispersed through all the part which ought to be nourished, and by and by it is put or ioyned vnto it, and after hauing gotten sufficient dryneſſe and clammie humour through naturall heate, it is glued and fastned, it increaseth, cleaueth together, and is vnited in one. The which commeth not so to passe in Anasarca Hidrope, when as the nutriment being more watrie, and not so clammie, by reason of the abundance of thin & watrie humours, falleth frō the sound parts of the liuing creature, & at the last it is made like vnto the parte which should bee nourished, when it is nutriment in deede (other are nutriments in power more proper, and remoue.) The which is not in Leuce. 1. Vitiligo.

2. Opus. All the parts enduring with nourishment so long as is possible.

Attractrix, which draweth vnto the part conuenient qualitie and iuyce. This faculty, like as the rest, being found in some instrument, as in the stomacke, reines, wombe, milt, bladder, purging medicines, and Alexiteries, is easilie transposed into the other parts.

3 Reten-

Auxili. 3. Retentrix. The retainer of the same vntill
facult. digestion be done.
helping Coctrix. Digester in altering, and that ma-
facul. keth it like.
Expultrix. Expeller of that which molesteth
the part, in quantitie, qualitie, or both.

But we will intreate of these foure faculties as most principall hereafter more at large.

1. Attractrix. The drawer of conuenient qualities and iuyce into euerie parte to nourish the same (the which is common vnto all partes that drawe vnto them such nutriment as is most proper for them, sometime thorough straight poyes, as in the stomache, and sometime onelie by the temperature of the parte, as almost in all the other partes, or else to the voluptuous delectation of the parte, whereby the month of the matrice doth drawe the sede of man to the verie end, and whereby the gall doth separate and drawe yeolow choler from the liuer, but in the Gall, yeolow choler is not ingendered, as Asclapiades saith, like as neither, he affirmeth melancholia humour in the splene, but of him it is drawen from the liuer to nourish it selfe. The reines doe diuide and onelie drawe the vrine out of a hollow veine from the bloud, and it is not carried of his owne accorde into the reines, as though that were the best.

Neither doe the hollow veines drawe together and wind about, thrust forth the vrine into the oblique reines, nor into these, which lie right vnderneath in the sides, to be strained out with all the bloud, and because it is thinner than bloud, to be transmitted: euen as all the Wine runneth into the vessell of the Wine-presse, and as the congealed milke is strained, the Whey alone runneth, and not the cheese: in like manner the reines doe expell the vrine into the bladder, through Vreteras, which are growing on ye sides of the bladder, and the humour which is receiued, Asclapiades saith, is resolued into vapours into the bladder, and into the bodie, hauing as it were two tunicles in it, the vapors are let passe by waies, vncertaine, darke, straight, & such as

can

can by no sense be perceiued. And they being once againe growen together, do receiue their first forme, and so out of vapours, humours are engendered, for so he hath depriued the reines and Vreteras of their function. Neither doe the part of bloud receiue pure bloud aboue the reines, but those things which are beneath, doe receiue the bloud from the reines, (vnto whom they bing fastned, through pressing wil as Serum be carried) being purged and distilled, as certaine of the scollers of Erasistratus saie: for if Serum were heauie, neither should it be carried of the stomacke into the liuer, to be distributed, neither into the reines by Caua, neyther doth a watrie humour runne into the reines, and a sanguine humour by Caua backward, like vnto oyle and water mingled, which when they are poured on the ground, each run contrarie waie, as other Erasistratians affirme. For yet as Licius saith, the wine is the nourishment of the reines. Therefore the reines doe drawe the wine, for that it is familiar and pleasant vnto them, and not by following that which is made emptie. For so when no more wine did abound, then was it made emptie by Ischuria, that is to saie, through suppression of the wine in the reines, bladder, or other passage belonging vnto wine, as we haue said before more largelie. In the Tractice of the stomacke and the throate, by their straight passages, there is no Deglutitio by contraction, as Erasistratus saith. In the Tractice of the liuer, there is a distribution of Chylum, out of the stomacke and entrailes, into the liuer, by the veines Meseraica. In the Tratrice of all the partes, there is distribution of bloud out of the liuer and Caua, into all partes by the braunches of the veine. And not as Erasistratus affirmeth, by the expression of the stomacke (for this although it were, so yet by reason of the length of time, it should haue small power, for the distribution of bloud through the veines), not by the veines contraict about the bloud, which they containe, not with that succession vnto that parte of our substance which is made vacant, and dispearsed from our heat, the which thing those that recouer from sickenesse doe declare, who if they haue not more nourishment flowing and

and abounding

abounding in them, then there is place vacant, they shall neuer recouer their accustomed helth, & moreouer, the abundance of blond in the bodie, could neuer be gathered together vpon the liuer. In the tracture of purging medicines it may appeare, they drawe proper qualities, or certaine humours, familiar vnto them, out of our bodies, as Scamonium draweth pecolowe choler out of one that hath the Iaundes, Elleborus niger draweth blacke choler ex Melancolico, Cnicus, Coccum, & Gnidium, draweth fleame ex Leucophlegmatico: flos æris, Squamma æris, æs Vstum, Chamedris, Chamelion, draweth a thin and watrie excrement ex Asctico, and these tumors are not engendered in vs of the medicines themselues, making our bodies supple, as Asclepiades doth falselie surmise, denying the facultie attractiue vnto euerie conuenient qualitie, whereby Magnes draweth yron, Succinum a little moate, and coyne the water layde vnderneath it in earthen vessells; and certaine medicines doe pull out splints and arrowe heads fastned verie deepe in the flesh, and also poison of Serpents, which was put in the same.

Likewise certaine medicines drawe the poison of Vipers, some the poison of Pastinaca marina, & other of others, insomuch that the poison drawen out, hath ben found lying vpon the medicine. By the which similitude, the same substance may drawe thinges, other medicines drawe not by hooke and crooke Atomos, ioyning together, as they mette one another with Epicurus, the which he and Asclepiades did appoint to be the first elements of all things.

Retentrix. The reteiner of proper qualities drawen vnto euerie parte, vntill digestion be perfect, when there is nourishment, but if there be excrements which doe trouble the part wherein it lieth, as in the entrailes, the bladders, &c. swelling with quantitie, or sharpe and biting qualities, or in both together. The childe is reteined in the wombe, vntill that through greatnesse, weight, biting, or that the infant be anoide with sweate, or vrine, the Membrane being broken, or through some other vrgent cause, it is constrained to be deliuered. This facultie like as the rest, is in

all parts which are to be nourished, but it appeareth most plainlie in those parts which are greatlie hollow, as in the stomache, womb, bladder, and is most delighted in these oblique passages, but in other partes it is more obscure, it is also placed in the temperature of those partes, euen as all the rest are.

Coctrix. The digester of the substaunce reteined in the part, the which substance is so much the rather made like vnto the parte by alteration, as it is more nérer, & of greater similitude, to the same in qualities, as of bloud, flesh is some made, but that substance which hath lesse similitude with the part, it is necessarie that it be chaunged slower, & first by all the meane qualities, as of bloud, hot, moist, and red, ther cannot at the first daie be made a bone, colde, hard, and white: but there must néeds be many alterations and chaunges, in the middle. And for that cause there are two kindes of instruments pertaining to nutrition. The one is that which draweth, carrieth, conteineth, and digesteth the nourishment, and as it were a straunge burthen, expelleth, and beareth it, such are first, Coctura, Os, Gula, Ventriculus, Intestina, second, Mesaraice, Vene, Hepar, Caua vena, thirolie, all the parts Similares, and of these, Organice, and Vene capillares, the which as the chiefest prepare by alteration the nourishment méete for euerie part. The other is, that which by drawing the excrement of nourishment, doth diuide, carrie, reteine, and purge it, as are Lien, Rene, Ambæ Vesicæ, with the passages of ỳ stomack, chiefly by Crassa intestina, Spincteres ambo, Musculi octo epigastrij. And those muscles which doe make the restraint of the breath, and also those which is verie profitable and necessarie for the siege, and vrine, and vnto the bearing of a childe. Thorough this nourishing alteration, when as the partes are made, that which remaineth is like vnto them, and therefore it is called Assimulatio, but through the ingendering alteration, those partes which before were not, are afterwards created.

Expultrix, the expeller of those things which could not bée ouercome, digested, or perfectlie altered, and that could not

not be made like vnto that which ought to be nourished, when they are greeued, as it were with a strange burden, the part which demaunded them, either by contection or attraction, and when they stretching out in quantitie, or troubling with sharpe qualitie, or both, doe greatly hurt it. This facultie, is exceedingly delited with croked wayes, which are these parts; the stomacke, entrailes, wombe, both the bladders, veines, and arteries. Expulsion, which is contrary vnto attraction, is often times through one passage, as vomite and swallowing downe through the throte: the fæde and the encrease, through the neck of the priuie parts. The distribution of nutriment, & the attraction of purging medicines, & voluntarie expultion of the iuice, abounding in vs, through Mesaraicas venas. These nourishing facultyes, are vnderstanded by the name of naturall things, for that from the conception of the fœde, euen vnto death, they are in a liuing creature, and also in a plant, for they help generation, & action, & one likewise furthereth an other, that by nutrition, there may be a certaine particuler generation and corruption, wherefore these three bookes entreat almost onely of these facultyes, vnto whome, corruptio, diminutio, & atrophia, are contrary. These facultyes with certain instruments, which haue action, cõmon vnto all the bodie, are of two sorts, that is, generall, and particuler. The generall are either all present, as in the stomack and liuer, or else three of them onely, as in the two bladders, for one of them digest, or two of them alone, as in the reines, for neither they digest, nor reteine, or at the least very little, by reaso that they want great capacitie, or else the facultie expulcrix, as the entrailes, which haue for that cause onely crooked passages in their tunikes. And forasmuch as these ought to be nourished, as wel as ỳ other similer parts. They haue foure particuler facultyes, nourishers of them, placed in the temperature of their substance.

Hetherto wee haue declared, which are the naturall actions, how they be made, and of what parts.

FINIS.

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